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(54) Title: COMPOSITIONS, KITS, AND METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF OVARIAN CANCER

(57) Abstract: The invention relates to compositions, kits, and methods for detecting, characterizing, preventing, and treating human ovarian cancers. A variety of markers are provided, wherein changes in the levels of expression of one or more of the markers is correlated with the presence of ovarian cancer.

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**COMPOSITIONS, KITS, AND METHODS FOR
IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF
OVARIAN CANCER**

5 **RELATED APPLICATIONS**

The present application claims priority to U.S. provisional patent application serial no. 60/152,547, filed on September 3, 1999, U.S. provisional patent application serial no. 60/190,347, filed on March 16, 2000, U.S. provisional patent application serial no. 60/191,321, filed on March 21, 2000, U.S. provisional patent application serial no. 10 60/208,382, filed on May 31, 2000 and U.S. provisional patent application serial no. 60/220,467, filed on July 20, 2000, all of which are expressly incorporated by reference.

FIELD OF THE INVENTION

The field of the invention is ovarian cancer, including diagnosis,
15 characterization, management, and therapy of ovarian cancer.

BACKGROUND OF THE INVENTION

Ovarian cancer is responsible for significant morbidity and mortality in populations around the world. Ovarian cancer is classified, on the basis of clinical and pathological features, in three groups, namely epithelial ovarian cancer (EOC; >90% of
20 ovarian cancer in Western countries), germ cell tumors (*circa* 2-3% of ovarian cancer), and stromal ovarian cancer (*circa* 5% of ovarian cancer; Ozols *et al.*, 1997, *Cancer Principles and Practice of Oncology*, 5th ed., DeVita *et al.*, Eds. pp. 1502). Relative to EOC, germ cell tumors and stromal ovarian cancers are more easily detected and treated
25 at an early stage, translating into higher/better survival rates for patients afflicted with these two types of ovarian cancer.

There are numerous types of ovarian tumors, some of which are benign, and others of which are malignant. Treatment (including non-treatment) options and predictions of patient outcome depend on accurate classification of the ovarian cancer.
30 Ovarian cancers are named according to the type of cells from which the cancer is derived and whether the ovarian cancer is benign or malignant. Recognized histological tumor types include, for example, serous, mucinous, endometrioid, and clear cell

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tumors. In addition, ovarian cancers are classified according to recognized grade and stage scales.

In grade I, the tumor tissue is well differentiated from normal ovarian tissue. In grade II, tumor tissue is moderately well differentiated. In grade III, the tumor tissue is poorly differentiated from normal tissue, and this grade correlates with a less favorable prognosis than grades I and II. Stage I is generally confined within the capsule surrounding one (stage IA) or both (stage IB) ovaries, although in some stage I (*i.e.* stage IC) cancers, malignant cells may be detected in ascites, in peritoneal rinse fluid, or on the surface of the ovaries. Stage II involves extension or metastasis of the tumor from one or both ovaries to other pelvic structures. In stage IIA, the tumor extends or has metastasized to the uterus, the fallopian tubes, or both. Stage IIB involves extension of the tumor to the pelvis. Stage IIC is stage IIA or IIB in which malignant cells may be detected in ascites, in peritoneal rinse fluid, or on the surface of the ovaries. In stage III, the tumor comprises at least one malignant extension to the small bowel or the omentum, has formed extrapelvic peritoneal implants of microscopic (stage IIIA) or macroscopic (< 2 centimeter diameter, stage IIIB; > 2 centimeter diameter, stage IIIC) size, or has metastasized to a retroperitoneal or inguinal lymph node (an alternate indicator of stage IIIC). In stage IV, distant (*i.e.* non-peritoneal) metastases of the tumor can be detected.

The durations of the various stages of ovarian cancer are not presently known, but are believed to be at least about a year each (Richart *et al.*, 1969, *Am. J. Obstet. Gynecol.* 105:386). Prognosis declines with increasing stage designation. For example, 5-year survival rates for patients diagnosed with stage I, II, III, and IV ovarian cancer are 80%, 57%, 25%, and 8%, respectively.

Despite being the third most prevalent gynecological cancer, ovarian cancer is the leading cause of death among those afflicted with gynecological cancers. The disproportionate mortality of ovarian cancer is attributable to a substantial absence of symptoms among those afflicted with early-stage ovarian cancer and to difficulty diagnosing ovarian cancer at an early stage. Patients afflicted with ovarian cancer most often present with non-specific complaints, such as abnormal vaginal bleeding, gastrointestinal symptoms, urinary tract symptoms, lower abdominal pain, and generalized abdominal distension. These patients rarely present with paraneoplastic

symptoms or with symptoms which clearly indicate their affliction. Presently, less than about 40% of patients afflicted with ovarian cancer present with stage I or stage II. Management of ovarian cancer would be significantly enhanced if the disease could be detected at an earlier stage, when treatments are much more generally efficacious.

- 5 Ovarian cancer may be diagnosed, in part, by collecting a routine medical history from a patient and by performing physical examination, x-ray examination, and chemical and hematological studies on the patient. Hematological tests which may be indicative of ovarian cancer in a patient include analyses of serum levels of proteins designated CA125 and DF3 and plasma levels of lysophosphatidic acid (LPA).
- 10 Palpation of the ovaries and ultrasound techniques (particularly including endovaginal ultrasound and color Doppler flow ultrasound techniques) can aid detection of ovarian tumors and differentiation of ovarian cancer from benign ovarian cysts. However, a definitive diagnosis of ovarian cancer typically requires performing exploratory laparotomy of the patient.
- 15 Potential tests for the detection of ovarian cancer (*e.g.*, screening, reflex or monitoring) may be characterized by a number of factors. The "sensitivity" of an assay refers to the probability that the test will yield a positive result in an individual afflicted with ovarian cancer. The "specificity" of an assay refers to the probability that the test will yield a negative result in an individual not afflicted with ovarian cancer. The
- 20 "positive predictive value" (PPV) of an assay is the ratio of true positive results (*i.e.* positive assay results for patients afflicted with ovarian cancer) to all positive results (*i.e.* positive assay results for patients afflicted with ovarian cancer + positive assay results for patients not afflicted with ovarian cancer). It has been estimated that in order for an assay to be an appropriate population-wide screening tool for ovarian cancer the
- 25 assay must have a PPV of at least about 10% (Rosenthal *et al.*, 1998, *Sem. Oncol.* 25:315-325). It would thus be desirable for a screening assay for detecting ovarian cancer in patients to have a high sensitivity and a high PPV. Monitoring and reflex tests would also require appropriate specifications.

- 30 Owing to the cost, limited sensitivity, and limited specificity of known methods of detecting ovarian cancer, screening is not presently performed for the general population. In addition, the need to perform laparotomy in order to diagnose ovarian cancer in patients who screen positive for indications of ovarian cancer limits the

desirability of population-wide screening, such that a PPV even greater than 10% would be desirable.

Prior use of serum CA125 level as a diagnostic marker for ovarian cancer indicated that this method exhibited insufficient specificity for use as a general
5 screening method. Use of a refined algorithm for interpreting CA125 levels in serial retrospective samples obtained from patients improved the specificity of the method without shifting detection of ovarian cancer to an earlier stage (Skakes, 1995, *Cancer* 76:2004). Screening for LPA to detect gynecological cancers including ovarian cancer exhibited a sensitivity of about 96% and a specificity of about 89%. However, CA125-
10 based screening methods and LPA-based screening methods are hampered by the presence of CA125 and LPA, respectively, in the serum of patients afflicted with conditions other than ovarian cancer. For example, serum CA125 levels are known to be associated with menstruation, pregnancy, gastrointestinal and hepatic conditions such as colitis and cirrhosis, pericarditis, renal disease, and various non-ovarian malignancies.
15 Serum LPA is known, for example, to be affected by the presence of non-ovarian gynecological malignancies. A screening method having a greater specificity for ovarian cancer than the current screening methods for CA125 and LPA could provide a population-wide screening for early stage ovarian cancer.

Presently greater than about 60% of ovarian cancers diagnosed in patients are
20 stage III or stage IV cancers. Treatment at these stages is largely limited to cytoreductive surgery (when feasible) and chemotherapy, both of which aim to slow the spread and development of metastasized tumor. Substantially all late stage ovarian cancer patients currently undergo combination chemotherapy as primary treatment, usually a combination of a platinum compound and a taxane. Median survival for
25 responding patients is about one year. Combination chemotherapy involving agents such as doxorubicin, cyclophosphamide, cisplatin, hexamethylmelamine, paclitaxel, and methotrexate may improve survival rates in these groups, relative to single-agent therapies. Various recently-developed chemotherapeutic agents and treatment regimens have also demonstrated usefulness for treatment of advanced ovarian cancer. For
30 example, use of the topoisomerase I inhibitor topectan, use of amifostine to minimize chemotherapeutic side effects, and use of intraperitoneal chemotherapy for patients having peritoneally implanted tumors have demonstrated at least limited utility.

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Presently, however, the 5-year survival rate for patients afflicted with stage III ovarian cancer is 25%, and the survival rate for patients afflicted with stage IV ovarian cancer is 8%.

In summary, the earlier ovarian cancer is detected, the aggressiveness of therapeutic intervention and the side effects associated with therapeutic intervention are minimized. More importantly, the earlier the cancer is detected, the survival rate and quality of life of ovarian cancer patients is enhanced. Thus, a pressing need exists for methods of detecting ovarian cancer as early as possible. There also exists a need for methods of detecting recurrence of ovarian cancer as well as methods for predicting and monitoring the efficacy of treatment. The present invention satisfies these needs.

SUMMARY OF THE INVENTION

The invention relates to a method of assessing whether a patient is afflicted with ovarian cancer. This method comprises the step of comparing the level of expression of a marker in a patient sample, wherein the marker is listed in Tables 1-11, and the normal level of expression of the marker in a control, *e.g.*, a sample from a patient without ovarian cancer. A significant difference between the level of expression of the marker in the patient sample and the normal level is an indication that the patient is afflicted with ovarian cancer. In a preferred embodiment, the marker is listed in Tables 2B or 2C (which are subsets of the markers listed in Table 2A), in Tables 3B or 3C (which are subsets of the markers listed in Table 3A), in Tables 4A or 5A (which are subsets of the markers listed in Tables 4 and 5, respectively), in Table 6A, in Tables 7A-7E or in Table 8. Preferably, a protein corresponding to the marker is a secreted protein or is predicted to correspond to a secreted protein (see, *e.g.* Tables 2D, 4A, 7A-7E). Alternatively, the marker can correspond to a protein which is normally expressed in ovarian tissue at a detectable level, to one having an extracellular portion, or both (see *e.g.*, Table 8).

In one method, the marker(s) are preferably selected such that the positive predictive value of the method is at least about 10%. Also preferred are embodiments of the method wherein the marker is over- or under-expressed by at least two-fold in at least about 20% of stage I ovarian cancer patients, stage II ovarian cancer patients, stage III ovarian cancer patients, stage IV ovarian cancer patients, grade I ovarian cancer patients, grade II ovarian cancer patients, grade III ovarian cancer patients, epithelial

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ovarian cancer patients, stromal ovarian cancer patients, germ cell ovarian cancer patients, malignant ovarian cancer patients, benign ovarian patients, serous neoplasm ovarian cancer patients, mucinous neoplasm ovarian cancer patients, endometrioid neoplasm ovarian cancer patients and/or clear cell neoplasm ovarian cancer patients.

5 In one embodiment of the methods of the present invention, the patient sample is an ovary-associated body fluid. Such fluids include, for example, blood fluids, lymph, ascitic fluids, gynecological fluids, cystic fluids, urine, and fluids collected by peritoneal rinsing. In another embodiment, the sample comprises cells obtained from the patient. In this embodiment, the cells may be found in a fluid selected from the group consisting
10 of a fluid collected by peritoneal rinsing, a fluid collected by uterine rinsing, a uterine fluid, a uterine exudate, a pleural fluid, and an ovarian exudate. In another embodiment, the patient sample is *in vivo*.

 In accordance with the methods of the present invention, the level of expression of the marker in a sample can be assessed, for example, by detecting the presence in the
15 sample of :

- a protein corresponding to the marker or a fragment of the protein (*e.g.* using a reagent, such as an antibody, an antibody derivative, or an antibody fragment, which binds specifically with the protein)
- a metabolite which is produced directly (*i.e.*, catalyzed) or indirectly by a
20 protein corresponding to the marker
- a transcribed polynucleotide (*e.g.* an mRNA or a cDNA), or fragment thereof, having at least a portion with which the marker is substantially homologous (*e.g.* by contacting a mixture of transcribed polynucleotides obtained from the sample with a substrate having one or more of the markers
25 listed in Tables 1-11 fixed thereto at selected positions)
- a transcribed polynucleotide or fragment thereof, wherein the polynucleotide anneals with the marker under stringent hybridization conditions.

 The methods of the present invention are particularly useful for patients with an
30 identified pelvic mass or symptoms associated with ovarian cancer. The methods of the present invention can also be of particular use with patients having an enhanced risk of developing ovarian cancer (*e.g.*, patients having a familial history of ovarian cancer,

patients identified as having a mutant oncogene, and patients at least about 50 years of age). The methods of the present invention may further be of particular use in monitoring the efficacy of treatment of an ovarian cancer patient (*e.g.* the efficacy of chemotherapy).

- 5 The methods of the present invention may be performed using a plurality (*e.g.* 2, 3, 5, or 10 or more) of markers. According to a method involving a plurality of markers, the level of expression in the sample of each of a plurality of markers independently selected from the markers listed in Tables 1-11 is compared with the normal level of expression of each of the plurality of markers in samples of the same type obtained from
- 10 control humans not afflicted with ovarian cancer. A significantly enhanced level of expression of one or more of the markers listed in Tables 1, 1A, 2A, 4 and 6, 6A, 7A, 7B, 7D and 8, a significantly reduced level of expression of one or more of the markers listed in Tables 3A, 5, 7C and 7E, or some combination thereof, in the sample, relative to the corresponding normal levels, is an indication that the patient is afflicted with
- 15 ovarian cancer. The markers of Tables 1-11 may also be used in combination with known ovarian cancer markers in the methods of the present invention.

In a preferred method of assessing whether a patient is afflicted with ovarian cancer (*e.g.*, new detection ("screening"), detection of recurrence, reflex testing), the method comprises comparing:

- 20 a) the level of expression of a marker in a patient sample, wherein at least one marker is selected from the markers of Tables 1-11 and,
- b) the normal level of expression of the marker in a control non-ovarian cancer sample.

- A significant difference between the level of expression of the marker in the patient
- 25 sample and the normal level is an indication that the patient is afflicted with ovarian cancer.

The methods of the present invention further include a method of assessing the efficacy of a test compound for inhibiting ovarian cancer in a patient. This method comprises comparing:

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a) expression of a marker in a first sample obtained from the patient and maintained in the presence of the test compound, wherein the marker is selected from the group consisting of the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8, and

5 b) expression of the marker in a second sample obtained from the patient and maintained in the absence of the test compound.

A significantly lower level of expression of the marker in the first sample, relative to the second sample, is an indication that the test compound is efficacious for inhibiting ovarian cancer in the patient. For example, the first and second samples can be portions
10 of a single sample obtained from the patient or portions of pooled samples obtained from the patient.

The invention still further includes a method of assessing the efficacy of a test compound for inhibiting ovarian cancer in a patient. This method comprises comparing:

15 a) expression of a marker in a first sample obtained from the patient and maintained in the presence of the test compound, wherein the marker is selected from the group consisting of the markers listed in Tables 3A, 5, 7C and 7E, and

b) expression of the marker in a second sample obtained from the patient and maintained in the absence of the test compound.

20 A significantly enhanced level of expression of the marker in the first sample, relative to the second sample, is an indication that the test compound is efficacious for inhibiting the ovarian cancer in the patient.

The invention further relates to a method of assessing the efficacy of a therapy for inhibiting ovarian cancer in a patient. This method comprises comparing:

25 a) expression of a marker in a first sample obtained from the patient prior to providing at least a portion of the therapy to the patient, wherein the marker is selected from the group consisting of the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8, and

30 b) expression of the marker in a second sample obtained from the patient following provision of the portion of the therapy.

A significantly lower level of expression of the marker in the second sample, relative to the first sample, is an indication that the therapy is efficacious for inhibiting ovarian cancer in the patient.

The invention further includes a method of assessing the efficacy of a therapy for inhibiting ovarian cancer in a patient, comprising comparing:

- 5 a) expression of a marker in a first sample obtained from the patient prior to providing at least a portion of the therapy to the patient, wherein the marker is selected from the group consisting of the markers listed in Tables 3A, 5, 7C and 7E, and
- 10 b) expression of the marker in a second sample obtained from the patient following provision of the portion of the therapy.

A significantly enhanced level of expression of the marker in the second sample, relative to the first sample, is an indication that the therapy is efficacious for inhibiting ovarian cancer in the patient.

15 It will be appreciated that in these methods the “therapy” may be any traditional therapy for treating ovarian cancer including, but not limited to, chemotherapy, radiation therapy and surgical removal of tissue, *e.g.*, an ovarian tumor. Thus, the methods of the invention may be used to evaluate a patient before, during and after therapy, for example, to evaluate the reduction in tumor burden.

20 The present invention therefore further comprises a method for monitoring the progression of ovarian cancer in a patient, the method comprising:

- a) detecting in a patient sample at a first time point, the expression of a marker, wherein the marker is selected from the group consisting of the markers listed in Tables 1-11;
- 25 b) repeating step a) at a subsequent time point in time; and
- c) comparing the level of expression detected in steps a) and b), and therefrom monitoring the progression of ovarian cancer in the patient.

The invention also includes a method of selecting a composition for inhibiting ovarian cancer in a patient. This method comprises the steps of:

- 30 a) obtaining a sample comprising cancer cells from the patient;
- b) separately maintaining aliquots of the sample in the presence of a plurality of test compositions;

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- c) comparing expression of a marker listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8 in each of the aliquots; and
- d) selecting one of the test compositions which induces a lower level of expression of the marker in the aliquot containing that test composition,
5 relative to other test compositions.

The invention further includes a method of selecting a composition for inhibiting ovarian cancer in a patient. This method comprises the steps of:

- a) obtaining a sample comprising cancer cells from the patient;
- b) separately maintaining aliquots of the sample in the presence of a
10 plurality of test compositions;
- c) comparing expression of a marker listed in Tables 3A, 5, 7C and 7E in each of the aliquots; and
- d) selecting one of the test compositions which induces an enhanced level of expression of the marker in the aliquot containing that test
15 composition, relative to other test compositions.

In addition, the invention includes a method of inhibiting ovarian cancer in a patient. This method comprises the steps of:

- a) obtaining a sample comprising cancer cells from the patient;
- b) separately maintaining aliquots of the sample in the presence of a
20 plurality of test compositions;
- c) comparing expression of a marker listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8 in each of the aliquots; and
- d) administering to the patient at least one of the test compositions which induces a lower level of expression of the marker in the aliquot
25 containing that test composition, relative to other test compositions.

The invention also includes a method of inhibiting ovarian cancer in a patient. This method comprises the steps of:

- a) obtaining a sample comprising cancer cells from the patient;
- b) separately maintaining aliquots of the sample in the presence of a
30 plurality of test compositions;
- c) comparing expression of a marker listed in Tables 3A, 5, 7C and 7E, in each of the aliquots; and

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d) administering to the patient at least one of the test compositions which induces an enhanced expression of the marker in the aliquot containing that test composition, relative to other test compositions.

The invention also includes a kit for assessing whether a patient is afflicted with ovarian cancer. This kit comprises reagents for assessing expression of a marker listed in Tables 1-11.

In another aspect, the invention relates to a kit for assessing the suitability of each of a plurality of compounds for inhibiting an ovarian cancer in a patient. The kit comprises a reagent for assessing expression of a marker listed in Tables 1-11, and may also comprise a plurality of compounds.

In another aspect, the invention relates to a kit for assessing the presence of ovarian cancer cells. This kit comprises an antibody, wherein the antibody binds specifically with a protein corresponding to a marker listed in Tables 1-11. The kit may also comprise a plurality of antibodies, wherein the plurality binds specifically with a protein corresponding to a different marker listed in Tables 1-11.

The invention also includes a kit for assessing the presence of ovarian cancer cells, wherein the kit comprises a nucleic acid probe. The probe binds specifically with a transcribed polynucleotide corresponding to a marker listed in Tables 1-11. The kit may also comprise a plurality of probes, wherein each of the probes binds specifically with a transcribed polynucleotide corresponding to a different marker listed in Tables 1-11.

The invention further relates to a method of making an isolated hybridoma which produces an antibody useful for assessing whether a patient is afflicted with ovarian cancer. The method comprises isolating a protein corresponding to a marker listed in Tables 1-11, immunizing a mammal using the isolated protein, isolating splenocytes from the immunized mammal, fusing the isolated splenocytes with an immortalized cell line to form hybridomas, and screening individual hybridomas for production of an antibody which specifically binds with the protein to isolate the hybridoma. The invention also includes an antibody produced by this method.

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The invention further includes a method of assessing the ovarian carcinogenic potential of a test compound. This method comprises the steps of:

- a) maintaining separate aliquots of ovarian cells in the presence and absence of the test compound; and
- 5 b) comparing expression of a marker in each of the aliquots.

The marker is selected from those listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8. A significantly enhanced level of expression of the marker in the aliquot maintained in the presence of (or exposed to) the test compound, relative to the aliquot maintained in the absence of the test compound, is an indication that the test compound
10 possesses ovarian carcinogenic potential.

The invention includes another method of assessing the ovarian carcinogenic potential of a test compound. This method comprises the steps of:

- a) maintaining separate aliquots of ovarian cells in the presence and absence of the test compound; and
- 15 b) comparing expression of a marker in each of the aliquots.

In this method, the marker is selected from those listed in Tables 3A, 5, 7C and 7E. A significantly lower level of expression of the marker in the aliquot maintained in the presence of the test compound, relative to the aliquot maintained in the absence of the test compound, is an indication that the test compound possesses ovarian
20 carcinogenic potential.

Additionally, the invention includes a kit for assessing the ovarian carcinogenic potential of a test compound. The kit comprises ovarian cells and a reagent for assessing expression of a marker in each of the aliquots. The marker is selected from those listed in Tables 1-11.

25 The invention further relates to a method of treating a patient afflicted with ovarian cancer. This method comprises providing to cells of the patient a protein corresponding to a marker listed in Tables 3A, 5, 7C and 7E. The protein can be provided to the cells, for example, by providing a vector comprising a polynucleotide encoding the protein to the cells.

The invention includes another method of treating a patient afflicted with ovarian cancer. This method comprises providing to cells of the patient an antisense oligonucleotide complementary to a polynucleotide corresponding to a marker listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8.

- 5 The invention includes a method of inhibiting ovarian cancer in a patient at risk for developing ovarian cancer. This method comprises inhibiting expression or overexpression of a gene corresponding to a marker listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8.

- 10 The invention includes another method of inhibiting ovarian cancer in a patient at risk for developing ovarian cancer. This method comprises enhancing expression of a gene corresponding to a marker listed in Tables 3A, 5, 7C and 7E.

- It will be appreciated that the methods and kits of the present invention may also include known cancer markers including known ovarian cancer markers. It will further be appreciated that the methods and kits may be used to identify cancers other than
15 ovarian cancer.

DETAILED DESCRIPTION OF THE INVENTION

- The invention relates to newly discovered correlations between expression of certain markers and the cancerous state of ovarian cells. It has been discovered that the
20 level of expression of individual markers and combinations of markers described herein correlates with the presence of ovarian cancer in a patient. Methods are provided for detecting the presence of ovarian cancer in a sample, the absence of ovarian cancer in a sample, the stage of an ovarian cancer, and with other characteristics of ovarian cancer that are relevant to prevention, diagnosis, characterization, and therapy of ovarian cancer
25 in a patient.

Definitions

 As used herein, each of the following terms has the meaning associated with it in this section.

- 30 The articles "a" and "an" are used herein to refer to one or to more than one (*i.e.* to at least one) of the grammatical object of the article. By way of example, "an element" means one element or more than one element.

A "marker" of the invention is a naturally-occurring polymer corresponding to at least one of the nucleic acids listed in Tables 1-11. In particular, a marker of the invention may be a nucleic acid molecule comprising a sequence listed in Tables 1-11 or a sequence which hybridizes under high stringency conditions with a polynucleotide sequence listed in Tables 1-11 ("nucleic acid marker"). Nucleic acid markers include, without limitation, sense and anti-sense strands of genomic DNA (*i.e.* including any introns occurring therein), RNA generated by transcription of genomic DNA (*i.e.* prior to splicing), RNA generated by splicing of RNA transcribed from genomic DNA, and proteins generated by translation of spliced RNA (*i.e.* including proteins both before and after cleavage of normally cleaved regions such as transmembrane signal sequences). As used herein, "marker" may also include a cDNA made by reverse transcription of an RNA generated by transcription of genomic DNA (including spliced RNA). A marker of the invention also may be a protein encoded by, for example, a nucleic acid marker.

The term "probe" refers to any molecule which is capable of selectively binding to a specifically intended target molecule, for example a marker of the invention. Probes can be either synthesized by one skilled in the art, or derived from appropriate biological preparations. For purposes of detection of the target molecule, probes may be specifically designed to be labeled, as described herein. Examples of molecules that can be utilized as probes include, but are not limited to, RNA, DNA, proteins, antibodies, and organic monomers.

An "ovary-associated" body fluid is a fluid which, when in the body of a patient, contacts or passes through ovarian cells or into which cells or proteins shed from ovarian cells *e.g.* ovarian epithelium, are capable of passing. Exemplary ovary-associated body fluids include blood fluids, lymph, ascites, gynecological fluids, cystic fluid, urine, and fluids collected by peritoneal rinsing.

The "normal" level of expression of a marker is the level of expression of the marker in ovarian cells of a patient, *e.g.* a human, not afflicted with ovarian cancer.

"Over-expression" and "under-expression" of a marker refer to expression of the marker of a patient at a greater or lesser level, respectively, than normal level of expression of the marker (*e.g.* at least two-fold greater or lesser level).

As used herein, the term "promoter/regulatory sequence" means a nucleic acid sequence which is required for expression of a gene product operably linked to the promoter/regulatory sequence. In some instances, this sequence may be the core promoter sequence and in other instances, this sequence may also include an enhancer sequence and other regulatory elements which are required for expression of the gene product. The promoter/regulatory sequence may, for example, be one which expresses the gene product in a tissue-specific manner.

A "constitutive" promoter is a nucleotide sequence which, when operably linked with a polynucleotide which encodes or specifies a gene product, causes the gene product to be produced in a living human cell under most or all physiological conditions of the cell.

An "inducible" promoter is a nucleotide sequence which, when operably linked with a polynucleotide which encodes or specifies a gene product, causes the gene product to be produced in a living human cell substantially only when an inducer which corresponds to the promoter is present in the cell.

A "tissue-specific" promoter is a nucleotide sequence which, when operably linked with a polynucleotide which encodes or specifies a gene product, causes the gene product to be produced in a living human cell substantially only if the cell is a cell of the tissue type corresponding to the promoter.

A "transcribed polynucleotide" is a polynucleotide (*e.g.* an RNA, a cDNA, or an analog of one of an RNA or cDNA) which is complementary to or homologous with all or a portion of a mature RNA made by transcription of a genomic DNA corresponding to a marker of the invention and normal post-transcriptional processing (*e.g.* splicing), if any, of the transcript.

"Complementary" refers to the broad concept of sequence complementarity between regions of two nucleic acid strands or between two regions of the same nucleic acid strand. It is known that an adenine residue of a first nucleic acid region is capable of forming specific hydrogen bonds ("base pairing") with a residue of a second nucleic acid region which is antiparallel to the first region if the residue is thymine or uracil. Similarly, it is known that a cytosine residue of a first nucleic acid strand is capable of base pairing with a residue of a second nucleic acid strand which is antiparallel to the first strand if the residue is guanine. A first region of a nucleic acid is complementary to

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a second region of the same or a different nucleic acid if, when the two regions are arranged in an antiparallel fashion, at least one nucleotide residue of the first region is capable of base pairing with a residue of the second region. Preferably, the first region comprises a first portion and the second region comprises a second portion, whereby, when the first and second portions are arranged in an antiparallel fashion, at least about 50%, and preferably at least about 75%, at least about 90%, or at least about 95% of the nucleotide residues of the first portion are capable of base pairing with nucleotide residues in the second portion. More preferably, all nucleotide residues of the first portion are capable of base pairing with nucleotide residues in the second portion.

"Homologous" as used herein, refers to nucleotide sequence similarity between two regions of the same nucleic acid strand or between regions of two different nucleic acid strands. When a nucleotide residue position in both regions is occupied by the same nucleotide residue, then the regions are homologous at that position. A first region is homologous to a second region if at least one nucleotide residue position of each region is occupied by the same residue. Homology between two regions is expressed in terms of the proportion of nucleotide residue positions of the two regions that are occupied by the same nucleotide residue. By way of example, a region having the nucleotide sequence 5'-ATTGCC-3' and a region having the nucleotide sequence 5'-TATGGC-3' share 50% homology. Preferably, the first region comprises a first portion and the second region comprises a second portion, whereby, at least about 50%, and preferably at least about 75%, at least about 90%, or at least about 95% of the nucleotide residue positions of each of the portions are occupied by the same nucleotide residue. More preferably, all nucleotide residue positions of each of the portions are occupied by the same nucleotide residue.

A marker is "fixed" to a substrate if it is covalently or non-covalently associated with the substrate such the substrate can be rinsed with a fluid (*e.g.* standard saline citrate, pH 7.4) without a substantial fraction of the marker dissociating from the substrate.

As used herein, a "naturally-occurring" nucleic acid molecule refers to an RNA or DNA molecule having a nucleotide sequence that occurs in nature (*e.g.* encodes a natural protein).

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Expression of a marker in a patient is "significantly" higher or lower than the normal level of expression of a marker if the level of expression of the marker is greater or less, respectively, than the normal level by an amount greater than the standard error of the assay employed to assess expression, and preferably at least twice, and more preferably three, four, five or ten times that amount. Alternately, expression of the marker in the patient can be considered "significantly" higher or lower than the normal level of expression if the level of expression is at least about two, and preferably at least about three, four, or five times, higher or lower, respectively, than the normal level of expression of the marker.

10 Ovarian cancer is "inhibited" if at least one symptom of the cancer is alleviated, terminated, slowed, or prevented. As used herein, ovarian cancer is also "inhibited" if recurrence or metastasis of the cancer is reduced, slowed, delayed, or prevented.

A kit is any manufacture (*e.g.* a package or container) comprising at least one reagent, *e.g.* a probe, for specifically detecting a marker of the invention, the
15 manufacture being promoted, distributed, or sold as a unit for performing the methods of the present invention.

Description

The present invention is based, in part, on identification of markers which are
20 expressed at a different level in ovarian cancer cells than they are in normal (*i.e.* non-cancerous) ovarian cells. The markers of the invention correspond to nucleic acid and polypeptide molecules which can be detected in one or both of normal and cancerous ovarian cells. The presence, absence, or level of expression of one or more of these markers in ovarian cells is herein correlated with the cancerous state of the tissue. The
25 invention thus includes compositions, kits, and methods for assessing the cancerous state of ovarian cells (*e.g.* cells obtained from a human, cultured human cells, archived or preserved human cells and *in vivo* cells).

The compositions, kits, and methods of the invention have the following uses, among others:

- 30
- 1) assessing whether a patient is afflicted with ovarian cancer;
 - 2) assessing the stage of ovarian cancer in a human patient;
 - 3) assessing the grade of ovarian cancer in a patient;

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- 4) assessing the benign or malignant nature of ovarian cancer in a patient;
- 5) assessing the histological type of neoplasm (*e.g.* serous, mucinous, endometroid, or clear cell neoplasm) associated with ovarian cancer in a patient;
- 6) making an isolated hybridoma which produces an antibody useful for assessing whether a patient is afflicted with ovarian cancer;
- 7) assessing the presence of ovarian cancer cells;
- 8) assessing the efficacy of one or more test compounds for inhibiting ovarian cancer in a patient;
- 9) assessing the efficacy of a therapy for inhibiting ovarian cancer in a patient;
- 10) monitoring the progression of ovarian cancer in a patient;
- 11) selecting a composition or therapy for inhibiting ovarian cancer in a patient;
- 12) treating a patient afflicted with ovarian cancer;
- 13) inhibiting ovarian cancer in a patient;
- 14) assessing the ovarian carcinogenic potential of a test compound; and
- 15) inhibiting an ovarian cancer in a patient at risk for developing ovarian cancer.

The invention thus includes a method of assessing whether a patient is afflicted with ovarian cancer. This method comprises comparing the level of expression of a marker in a patient sample and the normal level of expression of the marker in a control, *e.g.*, a non-ovarian cancer sample. A significant difference between the level of expression of the marker in the patient sample and the normal level is an indication that the patient is afflicted with ovarian cancer. The marker is selected from the group consisting of the markers listed in Tables 1-11. The markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8 are expressed at a greater level in ovarian cancer cells than in normal ovarian cells. The markers listed in Tables 3A, 5, 7C and 7E are expressed at a lower level in ovarian cancer cells than in normal ovarian cells. Although one or more

molecules corresponding to the markers listed in Tables 1-11 may have been described by others, the significance of the level of expression of these markers with regard to the cancerous state of ovarian cells has not previously been recognized.

Tables 1 and 1A list markers that were identified in subtractive libraries and
5 which are preferentially expressed in ovarian cancer cells over normal (*i.e.*, non-cancerous) ovarian cells.

Table 2A lists markers, expression of which was increased by at least 5-fold in at least one of twenty-three ovarian cancer samples tested, relative to its expression in normal (*i.e.* non-cancerous) ovarian samples. Table 2B lists markers, expression of
10 which was increased by at least 2-fold in all twenty-three ovarian cancer samples tested, relative to its expression in normal ovarian samples. Table 2C lists markers, expression of which was increased by at least 5-fold in at least 6 of the 23 ovarian cancer samples tested, relative to its expression in normal ovarian cells. Table 2D lists markers, expression of which was increased by at least 5-fold in at least 6 of the 23 ovarian
15 cancer samples, relative to expression in normal ovarian samples. In a preferred embodiment, proteins corresponding to the markers of Table 2D as well as fragments of the proteins, serve as antigens for antibody production, based upon proteomic studies, sequence analysis and/or literature references

Table 3A lists markers, expression of which was decreased by at least 5-fold in
20 at least one of twenty-three ovarian cancer samples tested, relative to its expression in normal (*i.e.*, non-cancerous) ovarian cells. Table 3B lists markers, expression of which was decreased by at least 2-fold in all twenty-three ovarian cancer samples tested, relative to its expression in normal ovarian cells. Table 3C lists markers, expression of which was decreased by at least 5-fold in at least 6 of the 23 ovarian cancer samples
25 tested, relative to its expression in normal ovarian cells.

Tables 4 and 5 list markers, expression of which was either increased (Table 4) or decreased (Table 5) in ovarian cancer samples, relative to expression in normal (*i.e.*, non-cancerous) ovarian samples. In particular, expression of the markers in 37 tumors (7 endometrioid tumors, 5 clear cell tumors and 25 serous tumors) was evaluated. A
30 ranking system based on the sum of the number of tumors multiplied by the fold regulation (for 2-fold, 3-fold, 5-fold and 10-fold regulation), divided by the total number

of tumors, was employed. A rank score was generated for four categories, endometroid tumors, clear cell tumors, serous tumors and overall.

For example, for # 19109 in Table 4A (first marker listed):

of tumors > 2-fold: $36 = (2 \times 0) = 0$

5 # of tumors > 3-fold: $36 = (3 \times 1) = 3$

of tumors > 5-fold: $35 = (5 \times 3) = 15$

of tumors > 10-fold: $32 = (10 \times 32) = 320$

The sum is 3 plus 15 plus 320, which equals 338. The score is therefore 338 divided by 37, which equals 9.1.

10 The markers of Table 4 had a score of greater than 1.5 for endometroid tumors, greater than 1.5 for clear cell tumors, greater than 1 for serous tumors, or greater than 0.8 overall. Table 4A shows the markers of Table 4 with a score of greater than 3 in any of the four categories.

15 The markers of Table 5 had a score of greater than 2.5 for endometroid tumors, greater than 2.5 for clear cell tumors, greater than 2 for serous tumors, or greater than 1.75 overall. Table 5A shows the markers of Table 5 with a score of greater than 3 in any of the four categories.

20 Tables 6 and 6A list markers that were identified in subtractive libraries and which are preferentially expressed in ovarian cancer cells over normal (*i.e.*, non-cancerous) ovarian cells.

Tables 7A-7E list markers that were identified in proteomic studies. The markers of Table 7A are secreted or membrane proteins, expression of which was increased at least 5-fold in two or more ovarian cancer samples or cell lines, relative to at least a 10-fold decrease in expression in normal ovarian samples.

25 The markers of Table 7B are secreted or membrane proteins, expression of which was increased in one ovarian cancer sample cell line, relative to expression in normal ovarian samples, where the medium expression of normals equaled 0 (the expression level of the ovarian cancer sample and cell lines was divided by 0.001, rather than 0).

30 The markers of Table 7C are preferred secreted or membrane proteins, expression of which was decreased in ovarian cancer samples and cell lines, relative to expression in normal ovarian samples.

The markers of Table 7D are secreted or membrane proteins present in ovarian cancer cell supernatants.

The markers of Table 7E are secreted or membrane proteins present in normal cell supernatants.

- 5 Table 8 lists novel genes that are overexpressed in ovarian cancer samples, relative to expression in normal ovarian samples.

Table 9 summarizes TaqMan® expression data for the novel genes of Table 8.

Tables 10A-10N summarize Northern Blot analysis of the novel genes of Table 8.

- 10 Table 11 summarizes LightCycler data and RT-PCR data for various markers of the present invention.

- Any marker or combination of markers listed in Tables 1-11, as well as any known markers in combination with the markers set forth in Tables 1-11, may be used in the compositions, kits, and methods of the present invention. Use of markers listed in
- 15 Tables 2B, 2C, 2D, 3B, 3C, 4A, 5A, 6A, 7A-7E and 8 are preferred, wherein use of markers listed in Tables 2C, 2D, 3C, 6A, 7A-7C and 8 are more preferred. In general, it is preferable to use markers for which the difference between the level of expression of the marker in ovarian cancer cells and the level of expression of the same marker in normal ovarian cells is as great as possible. Although this difference can be as small as
- 20 the limit of detection of the method for assessing expression of the marker, it is preferred that the difference be at least greater than the standard error of the assessment method, and preferably a difference of at least 2-, 3-, 4-, 5-, 6-, 7-, 8-, 9-, 10-, 15-, 20-, 25-, 100-, 500-, 1000-fold or greater.

- It is recognized that certain markers correspond to proteins which are secreted
- 25 from ovarian cells (*i.e.* one or both of normal and cancerous cells) to the extracellular space surrounding the cells (see, *e.g.* Tables 2D, 7A-7E and 8). These markers are preferably used in certain embodiments of the compositions, kits, and methods of the invention, owing to the fact that the protein corresponding to each of these markers can be detected in an ovary-associated body fluid sample, which may be more easily
- 30 collected from a human patient than a tissue biopsy sample. In addition, preferred *in vivo* techniques for detection of a protein corresponding to a marker of the invention include introducing into a subject a labeled antibody directed against the protein. For

example, the antibody can be labeled with a radioactive marker whose presence and location in a subject can be detected by standard imaging techniques.

Although not every marker corresponding to a secreted protein is indicated as such in the Tables herein, it is a simple matter for the skilled artisan to determine whether any particular marker corresponds to a secreted protein. In order to make this determination, the protein corresponding to a marker is expressed in a test cell (e.g. a cell of an ovarian cell line), extracellular fluid is collected, and the presence or absence of the protein in the extracellular fluid is assessed (e.g. using a labeled antibody which binds specifically with the protein).

- 10 The following is an example of a method which can be used to detect secretion of a protein corresponding to a marker of the invention. About 8×10^5 293T cells are incubated at 37°C in wells containing growth medium (Dulbecco's modified Eagle's medium {DMEM} supplemented with 10% fetal bovine serum) under a 5% (v/v) CO₂, 95% air atmosphere to about 60-70% confluence. The cells are then transfected using a standard transfection mixture comprising 2 micrograms of DNA comprising an expression vector encoding the protein and 10 microliters of LipofectAMINE™ (GIBCO/BRL Catalog no. 18342-012) per well. The transfection mixture is maintained for about 5 hours, and then replaced with fresh growth medium and maintained in an air atmosphere. Each well is gently rinsed twice with DMEM which does not contain methionine or cysteine (DMEM-MC; ICN Catalog no. 16-424-54). About 1 milliliter of DMEM-MC and about 50 microcuries of Trans-³⁵S™ reagent (ICN Catalog no. 51006) are added to each well. The wells are maintained under the 5% CO₂ atmosphere described above and incubated at 37°C for a selected period. Following incubation, 150 microliters of conditioned medium is removed and centrifuged to remove floating cells and debris. The presence of the protein in the supernatant is an indication that the protein is secreted.
- 15
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- Examples of ovary-associated body fluids include blood fluids (e.g. whole blood, blood serum, blood having platelets removed therefrom, etc.), lymph, ascitic fluids, gynecological fluids (e.g. ovarian, fallopian, and uterine secretions, menses, vaginal douching fluids, fluids used to rinse cervical cell samples, etc.), cystic fluid, urine, and fluids collected by peritoneal rinsing (e.g. fluids applied and collected during laparoscopy or fluids instilled into and withdrawn from the peritoneal cavity of a human
- 30

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patient). In these embodiments, the level of expression of the marker can be assessed by assessing the amount (e.g. absolute amount or concentration) of the marker in an ovary-associated body fluid obtained from a patient. The fluid can, of course, be subjected to a variety of well-known post-collection preparative and storage techniques (e.g. storage, freezing, ultrafiltration, concentration, evaporation, centrifugation, etc.) prior to assessing the amount of the marker in the fluid.

Many ovary-associated body fluids (*i.e.* usually excluding urine) can have ovarian cells, e.g. ovarian epithelium, therein, particularly when the ovarian cells are cancerous, and, more particularly, when the ovarian cancer is metastasizing. Cell-containing fluids which can contain ovarian cancer cells include, but are not limited to, peritoneal ascites, fluids collected by peritoneal rinsing, fluids collected by uterine rinsing, uterine fluids such as uterine exudate and menses, pleural fluid, and ovarian exudates. Thus, the compositions, kits, and methods of the invention can be used to detect expression of markers corresponding to proteins having at least one portion which is displayed on the surface of cells which express it. Examples of such proteins are indicated in the Tables herein. Although not every protein having at least one cell-surface portion is indicated in the Tables, it is a simple matter for the skilled artisan to determine whether the protein corresponding to any particular marker comprises a cell-surface protein. For example, immunological methods may be used to detect such proteins on whole cells, or well known computer-based sequence analysis methods (e.g. the SIGNALP program; Nielsen *et al.*, 1997, *Protein Engineering* 10:1-6) may be used to predict the presence of at least one extracellular domain (*i.e.* including both secreted proteins and proteins having at least one cell-surface domain). Expression of a marker corresponding to a protein having at least one portion which is displayed on the surface of a cell which expresses it may be detected without necessarily lysing the cell (e.g. using a labeled antibody which binds specifically with a cell-surface domain of the protein).

Expression of a marker of the invention may be assessed by any of a wide variety of well known methods for detecting expression of a transcribed molecule or its corresponding protein. Non-limiting examples of such methods include immunological methods for detection of secreted, cell-surface, cytoplasmic, or nuclear proteins, protein purification methods, protein function or activity assays, nucleic acid hybridization

methods, nucleic acid reverse transcription methods, and nucleic acid amplification methods.

In a preferred embodiment, expression of a marker is assessed using an antibody (e.g. a radio-labeled, chromophore-labeled, fluorophore-labeled, or enzyme-labeled antibody), an antibody derivative (e.g. an antibody conjugated with a substrate or with the protein or ligand of a protein-ligand pair {e.g. biotin-streptavidin}), or an antibody fragment (e.g. a single-chain antibody, an isolated antibody hypervariable domain, etc.) which binds specifically with a protein corresponding to the marker, such as the protein encoded by the open reading frame corresponding to the marker or such a protein which has undergone all or a portion of its normal post-translational modification.

In another preferred embodiment, expression of a marker is assessed by preparing mRNA/cDNA (*i.e.* a transcribed polynucleotide) from cells in a patient sample, and by hybridizing the mRNA/cDNA with a reference polynucleotide which is a complement of a polynucleotide comprising the marker, and fragments thereof. cDNA can, optionally, be amplified using any of a variety of polymerase chain reaction methods prior to hybridization with the reference polynucleotide; preferably, it is not amplified. Expression of one or more markers can likewise be detected using quantitative PCR to assess the level of expression of the marker(s). Alternatively, any of the many known methods of detecting mutations or variants (e.g. single nucleotide polymorphisms, deletions, etc.) of a marker of the invention may be used to detect occurrence of a marker in a patient.

In a related embodiment, a mixture of transcribed polynucleotides obtained from the sample is contacted with a substrate having fixed thereto a polynucleotide complementary to or homologous with at least a portion (e.g. at least 7, 10, 15, 20, 25, 30, 40, 50, 100, 500, or more nucleotide residues) of a marker of the invention. If polynucleotides complementary to or homologous with are differentially detectable on the substrate (e.g. detectable using different chromophores or fluorophores, or fixed to different selected positions), then the levels of expression of a plurality of markers can be assessed simultaneously using a single substrate (e.g. a "gene chip" microarray of polynucleotides fixed at selected positions). When a method of assessing marker expression is used which involves hybridization of one nucleic acid with another, it is preferred that the hybridization be performed under stringent hybridization conditions.

Because the compositions, kits, and methods of the invention rely on detection of a difference in expression levels of one or more markers of the invention, it is preferable that the level of expression of the marker is significantly greater than the minimum detection limit of the method used to assess expression in at least one of normal ovarian
5 cells and cancerous ovarian cells.

Preferably, at least one of the marker(s) used in the compositions, kits, and methods of the invention is a marker for which the "Tissue Prominence," as indicated in the Tables herein, includes, without limitation, an epithelial tissue such as ovarian, stomach, foreskin, colon, uterus, esophagus, synovial membrane, small intestine, breast,
10 skin, cervix, adrenal gland, eye, gall bladder, lung, placenta, prostate and retina tissues. Preferably, the marker is one for which ovary is listed among the Tissue Prominence tissues in one or more of the Tables.

The chromosomal location corresponding to each of a number of the markers listed in the Tables herein is known and is also listed in the Tables. In addition, the
15 chromosomal locations of a number of loci and chromosomal regions associated with ovarian cancers are known (Lynch *et al.*, 1998, *Sem. Oncol.* 25:265-280). For example, *AKT2* is located on chromosome 19 at q13.1-13.2, copy number increases have been observed at 8q24, 20q13.2-qter, 3q26.3, 1q32, 20p, 9p21-pter, 12p, and 5p14-pter, DNA amplifications have been observed at 8q24, 3q26.3, and 20q13.3, *c-MYC* is located at
20 8q24, *MYBL2* is located at 20q13.1, *EVII* is located at 3q26, loss of heterozygosity has been observed on chromosomes 6, 9, 13q, 17, 18q, 19p, 22q and Xp, including at locations 17p(p13.3, 13.1), 17q(q21, q22-q23), 18q (q21.3-qter), 6q(q26-q27), 11q(q23.3-qter), and 11p(p13-p15.5), *TP53* is located at 17p13.1, *BRCAl* is located at 17q21, the prohibitin gene and *NM23* are both located at 17q23-24, *NF1* is located at
25 17q11, and *ERBB2* is located at 17q21. At least one previously unidentified gene which contributes to development of ovarian cancer has been suggested to reside on chromosome 17 (Lynch *et al.*, *supra*), particularly on 17p, and more particularly in the vicinity of 17p13.3. Thus, markers which map to one or more of these chromosomal locations, or to a location relatively near one of these locations are preferred for use in
30 the compositions, kits, and methods of the invention.

It is understood that by routine screening of additional patient samples using one or more of the markers of the invention, it will be realized that certain of the markers are over- or under-expressed in cancers of various types, including specific ovarian cancers, as well as other cancers such as breast cancer, cervical cancer, etc. For example, it will

5 be confirmed that some of the markers of the invention are over- or under-expressed in most (*i.e.* 50% or more) or substantially all (*i.e.* 80% or more) of ovarian cancer. Furthermore, it will be confirmed that certain of the markers of the invention are associated with ovarian cancer of various stages (*i.e.* stage I, II, III, and IV ovarian cancers, as well as subclassifications IA, IB, IC, IIA, IIB, IIC, IIIA, IIIB, and IIIC, using

10 the FIGO Stage Grouping system for primary carcinoma of the ovary; 1987, *Am. J. Obstet. Gynecol.* 156:236), of various histologic subtypes (*e.g.* serous, mucinous, endometrioid, and clear cell subtypes, as well as subclassifications and alternate classifications adenocarcinoma, papillary adenocarcinoma, papillary cystadenocarcinoma, surface papillary carcinoma, malignant adenofibroma,

15 cystadenofibroma, adenocarcinoma, cystadenocarcinoma, adenoacanthoma, endometrioid stromal sarcoma, mesodermal (Müllerian) mixed tumor, mesonephroid tumor, malignant carcinoma, Brenner tumor, mixed epithelial tumor, and undifferentiated carcinoma, using the WHO/FIGO system for classification of malignant ovarian tumors; Scully, *Atlas of Tumor Pathology*, 3d series, Washington DC), and

20 various grades (*i.e.* grade I {well differentiated} , grade II {moderately well differentiated}, and grade III {poorly differentiated from surrounding normal tissue}). In addition, as a greater number of patient samples are assessed for expression of the markers of the invention and the outcomes of the individual patients from whom the samples were obtained are correlated, it will also be confirmed that altered expression of

25 certain of the markers of the invention are strongly correlated with malignant cancers and that altered expression of other markers of the invention are strongly correlated with benign tumors. The compositions, kits, and methods of the invention are thus useful for characterizing one or more of the stage, grade, histological type, and benign/malignant nature of ovarian cancer in patients. In addition, these compositions, kits, and methods

30 can be used to detect and differentiate epithelial, stromal, and germ cell ovarian cancers.

When the compositions, kits, and methods of the invention are used for characterizing one or more of the stage, grade, histological type, and benign/malignant nature of ovarian cancer in a patient, it is preferred that the marker or panel of markers of the invention is selected such that a positive result is obtained in at least about 20%, and preferably at least about 40%, 60%, or 80%, and more preferably in substantially all patients afflicted with an ovarian cancer of the corresponding stage, grade, histological type, or benign/malignant nature. Preferably, the marker or panel of markers of the invention is selected such that a PPV of greater than about 10% is obtained for the general population (more preferably coupled with an assay specificity greater than 99.5%).

When a plurality of markers of the invention are used in the compositions, kits, and methods of the invention, the level of expression of each marker in a patient sample can be compared with the normal level of expression of each of the plurality of markers in non-cancerous samples of the same type, either in a single reaction mixture (*i.e.* using reagents, such as different fluorescent probes, for each marker) or in individual reaction mixtures corresponding to one or more of the markers. In one embodiment, a significantly enhanced level of expression of more than one of the plurality of markers in the sample, relative to the corresponding normal levels, is an indication that the patient is afflicted with ovarian cancer. In another embodiment, a significantly lower level of expression in the sample of each of the plurality of markers, relative to the corresponding normal levels, is an indication that the patient is afflicted with ovarian cancer. In yet another embodiment, a significantly enhanced level of expression of one or more marks and a significantly lower level of expression of one or more markers in a sample relative to the corresponding normal levels, is an indication that the patient is afflicted with ovarian cancer. When a plurality of markers is used, it is preferred that 2, 3, 4, 5, 8, 10, 12, 15, 20, 30, or 50 or more individual markers be used, wherein fewer markers are preferred.

In order to maximize the sensitivity of the compositions, kits, and methods of the invention (*i.e.* by interference attributable to cells of non-ovarian origin in a patient sample), it is preferable that the marker of the invention used therein be a marker which has a restricted tissue distribution, *e.g.*, normally not expressed in a non-epithelial tissue, and more preferably a marker which is normally not expressed in a non-ovarian tissue.

Only a small number of markers are known to be associated with ovarian cancers (e.g. *AKT2*, *Ki-RAS*, *ERBB2*, *c-MYC*, *RBI*, and *TP53*; Lynch, *supra*). These markers are not, of course, included among the markers of the invention, although they may be used together with one or more markers of the invention in a panel of markers, for example.

- 5 It is well known that certain types of genes, such as oncogenes, tumor suppressor genes, growth factor-like genes, protease-like genes, and protein kinase-like genes are often involved with development of cancers of various types. Thus, among the markers of the invention, use of those which correspond to proteins which resemble known proteins encoded by known oncogenes and tumor suppressor genes, and those which correspond
- 10 to proteins which resemble growth factors, proteases, and protein kinases are preferred.

Known oncogenes and tumor suppressor genes include, for example, *abl*, *abr*, *akt2*, *apc*, *bcl2 α* , *bcl2 β* , *bcl3*, *bcr*, *brca1*, *brca2*, *cbl*, *ccnd1*, *cdc42*, *cdk4*, *crk- II*, *csflr/fms*, *dbl*, *dcc*, *dpc4/smad4*, *e-cad*, *e2f1/rbap*, *egfr/erb-1*, *elk1*, *elk3*, *eph*, *erg*, *ets1*, *ets2*, *fer*, *fgr/src2*, *fli1/ergb2*, *fos*, *fps/fes*, *fra1*, *fra2*, *fyn*, *hck*, *hek*, *her2/erb-2/neu*,
 15 *her3/erb-3*, *her4/erb-4*, *hras1*, *hst2*, *hstf1*, *igfbp2*, *ink4a*, *ink4b*, *int2/fgf3*, *jun*, *junb*, *jund*, *kip2*, *kit*, *kras2a*, *kras2b*, *lck*, *lyn*, *mas*, *max*, *mcc*, *mdm2*, *met*, *mlh1*, *mmp10*, *mos*, *msh2*, *msh3*, *msh6*, *myb*, *myba*, *mybb*, *myc*, *mycl1*, *mycn*, *nfl*, *nf2*, *nme2*, *nras*, *p53*, *pdgfb*, *phb*, *pim1*, *pms1*, *pms2*, *pic*, *plen*, *raf1*, *rap1a*, *rbl*, *rel*, *ret*, *ros1*, *ski*, *src1*, *tall*, *tgfb2*, *tgfb3*, *tgfb3*, *thra1*, *thrb*, *tiam1*, *timp3*, *tjp1*, *tp53*, *trk*, *vav*, *vhl*, *vil2*, *waf1*, *wnt1*,
 20 *wnt2*, *wt1*, and *yes1* (Hesketh, 1997, In: *The Oncogene and Tumour Suppressor Gene Facts Book*, 2nd Ed., Academic Press; Fishel *et al.*, 1994, *Science* 266:1403-1405).

Known growth factors include platelet-derived growth factor alpha, platelet-derived growth factor beta (simian sarcoma viral {v-sis} oncogene homolog), thrombopoietin (myeloproliferative leukemia virus oncogene ligand, megakaryocyte
 25 growth and development factor), erythropoietin, B cell growth factor, macrophage stimulating factor 1 (hepatocyte growth factor-like protein), hepatocyte growth factor (hepatopoietin A), insulin-like growth factor 1 (somatomedia C), hepatoma-derived growth factor, amphiregulin (schwannoma-derived growth factor), bone morphogenetic proteins 1, 2, 3, 3 beta, and 4, bone morphogenetic protein 7 (osteogenic protein 1), bone
 30 morphogenetic protein 8 (osteogenic protein 2), connective tissue growth factor, connective tissue activation peptide 3, epidermal growth factor (EGF), teratocarcinoma-derived growth factor 1, endothelin, endothelin 2, endothelin 3, stromal cell-derived

factor 1, vascular endothelial growth factor (VEGF), VEGF-B, VEGF-C, placental growth factor (vascular endothelial growth factor-related protein), transforming growth factor alpha, transforming growth factor beta 1 and its precursors, transforming growth factor beta 2 and its precursors, fibroblast growth factor 1 (acidic), fibroblast growth factor 2 (basic), fibroblast growth factor 5 and its precursors, fibroblast growth factor 6 and its precursors, fibroblast growth factor 7 (keratinocyte growth factor), fibroblast growth factor 8 (androgen-induced), fibroblast growth factor 9 (glia-activating factor), pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1), brain-derived neurotrophic factor, and recombinant glial growth factor 2.

10 Known proteases include interleukin-1 beta convertase and its precursors, Mch6 and its precursors, Mch2 isoform alpha, Mch4, Cpp32 isoform alpha, Lice2 gamma cysteine protease, Ich-1S, Ich-1L, Ich-2 and its precursors, TY protease, matrix metalloproteinase 1 (interstitial collagenase), matrix metalloproteinase 2 (gelatinase A, 72kD gelatinase, 72kD type IV collagenase), matrix metalloproteinase 7 (matrilysin),
 15 matrix metalloproteinase 8 (neutrophil collagenase), matrix metalloproteinase 12 (macrophage elastase), matrix metalloproteinase 13 (collagenase 3), metalloproteinase 1, cysteine-rich metalloproteinase (disintegrin) and its precursors, subtilisin-like protease Pc8 and its precursors, chymotrypsin, snake venom-like protease, cathepsin I, cathepsin D (lysosomal aspartyl protease), stromelysin, aminopeptidase N, plasminogen, tissue
 20 plasminogen activator, plasminogen activator inhibitor type II, and urokinase-type plasminogen activator.

Known protein kinases include DAP kinase, serine/threonine protein kinases NIK, PK428, Krs-2, SAK, and EMK, interferon-inducible double stranded RNA dependent protein kinase, FAST kinase, AIM1, IPL1-like midbody-associated protein
 25 kinase-1, NIMA-like protein kinase 1 (NLK1), the cyclin-dependent kinases (cdk1-10), checkpoint kinase Chk1, Nek3 protein kinase, BMK1 beta kinase, Clk1, Clk2, Clk3, extracellular signal-regulated kinases 1, 3, and 6, cdc28 protein kinase 1, cdc28 protein kinase 2, pLK, Myt1, c-Jun N-terminal kinase 2, Cam kinase 1, the MAP kinases, insulin-stimulated protein kinase 1, beta-adrenergic receptor kinase 2, ribosomal protein
 30 S6 kinase, kinase suppressor of ras-1 (KSR1), putative serine/threonine protein kinase Prk, PkB kinase, cAMP-dependent protein kinase, cGMP-dependent protein kinase, type II cGMP-dependent protein kinase, protein kinases Dyrk2, Dyrk3, and Dyrk4, Rho-

associated coiled-coil containing protein kinase p160ROCK, protein tyrosine kinase t-Ror1, Ste20-related kinases, cell adhesion kinase beta, protein kinase 3, stress-activated protein kinase 4, protein kinase Zpk, serine kinase hPAK65, dual specificity mitogen-activated protein kinases 1 and 2, casein kinase I gamma 2, p21-activated protein kinase

5 Pak1, lipid-activated protein kinase PRK2, focal adhesion kinase, dual-specificity tyrosine-phosphorylation regulated kinase, myosin light chain kinase, serine kinases SRPK2, TESK1, and VRK2, B lymphocyte serine/threonine protein kinase, stress-activated protein kinases JNK1 and JNK2, phosphorylase kinase, protein tyrosine kinase Tec, Jak2 kinase, protein kinase Ndr, MEK kinase 3, SHB adaptor protein (a Src

10 homology 2 protein), agammaglobulinaemia protein-tyrosine kinase (Atk), protein kinase ATR, guanylate kinase 1, thrombopoietin receptor and its precursors, DAG kinase epsilon, and kinases encoded by oncogenes or viral oncogenes such as v-fgr (Gardner-Rasheed), v-abl (Abelson murine leukemia viral oncogene homolog 1), v-arg (Abelson murine leukemia viral oncogene homolog, Abelson-related gene), v-fes and v-

15 fps (feline sarcoma viral oncogene and Fujinami avian sarcoma viral oncogene homologs), proto-oncogene *c-cot*, oncogene *pim-1*, and oncogene *mas1*.

Previously known proteins (and, of course, the genes, transcripts, mRNAs, etc. corresponding to those proteins) designated NES1, HE4, and neurosin, are included as markers. NES1 protein is also known as protease serine-like 1 and normal epithelial

20 cell-specific protein, and has been assigned Swiss-Prot accession number O43240 and GenBank accession number AF024605. The amino acid sequence of NES1 protein and the nucleotide sequence of a cDNA encoding it have also been described in U.S. Patent 5,736,377. Association of NES1 protein expression and occurrence of cancer has been described, for example, in U.S. Patent 5,843,694. However, these references (and

25 others, *e.g.* Liu *et al.*, 1996, *Cancer Res.* 56:3371-3379; Luo *et al.*, 1998, *Biochem. Biophys. Res. Comm.* 247:580-586; Goyal *et al.*, 1998, *Cancer Res.* 58:4782-4786) indicate that NES1 expression is down-regulated in cancer patients. In contrast, the present inventors have discovered that NES1 expression is up-regulated in ovarian cancer samples (*e.g.* in later stage {*i.e.* stage 3 or 4} ovarian cancer cell lines).

30 HE4 protein is also known as major epididymis-specific protein E4 and epididymal secretory protein E4, and has been assigned Swiss-Prot accession number Q14508 and GenBank accession number X63187. The amino acid sequence and the

corresponding cDNA nucleotide sequence were also disclosed in Kirchhoff *et al.* (1991) *Biol. Reprod.* 45:350-357. A possible association between expression of HE4 and occurrence of ovarian cancer was disclosed, for example in Wang *et al.* (1999) *Gene* 229:101-108.

- 5 Neurosin is also known as protease M, zyme, and SP59, and has been assigned Swiss-Prot accession number Q92876 and GenBank accession number U62801. The amino acid sequence of neurosin and the corresponding cDNA nucleotide sequence were also disclosed in Anisowicz *et al.* (1996) *Mol. Med.* 2:624-636. The same reference discloses a possible association between expression of neurosin and
- 10 occurrence of ovarian cancer.

It is recognized that the compositions, kits, and methods of the invention will be of particular utility to patients having an enhanced risk of developing ovarian cancer and their medical advisors. Patients recognized as having an enhanced risk of developing ovarian cancer include, for example, patients having a familial history of ovarian cancer,

15 patients identified as having a mutant oncogene (*i.e.* at least one allele), and patients of advancing age (*i.e.* women older than about 50 or 60 years).

The level of expression of a marker in normal (*i.e.* non-cancerous) human ovarian tissue can be assessed in a variety of ways. In one embodiment, this normal level of expression is assessed by assessing the level of expression of the marker in a

20 portion of ovarian cells which appears to be non-cancerous and by comparing this normal level of expression with the level of expression in a portion of the ovarian cells which is suspected of being cancerous. For example, when laparoscopy or other medical procedure, reveals the presence of a lump on one portion of a patient's ovary, but not on another portion of the same ovary or on the other ovary, the normal level of

25 expression of a marker may be assessed using one or both of the non-affected ovary and a non-affected portion of the affected ovary, and this normal level of expression may be compared with the level of expression of the same marker in an affected portion (*i.e.* the lump) of the affected ovary. Alternately, and particularly as further information becomes available as a result of routine performance of the methods described herein,

30 population-average values for normal expression of the markers of the invention may be used. In other embodiments, the 'normal' level of expression of a marker may be determined by assessing expression of the marker in a patient sample obtained from a

non-cancer-afflicted patient, from a patient sample obtained from a patient before the suspected onset of ovarian cancer in the patient, from archived patient samples, and the like.

The invention includes compositions, kits, and methods for assessing the
5 presence of ovarian cancer cells in a sample (*e.g.* an archived tissue sample or a sample obtained from a patient). These compositions, kits, and methods are substantially the same as those described above, except that, where necessary, the compositions, kits, and methods are adapted for use with samples other than patient samples. For example,
10 when the sample to be used is a paraffinized, archived human tissue sample, it can be necessary to adjust the ratio of compounds in the compositions of the invention, in the kits of the invention, or the methods used to assess levels of marker expression in the sample. Such methods are well known in the art and within the skill of the ordinary artisan.

The invention includes a kit for assessing the presence of ovarian cancer cells
15 (*e.g.* in a sample such as a patient sample). The kit comprises a plurality of reagents, each of which is capable of binding specifically with a nucleic acid or polypeptide corresponding to a marker of the invention. Suitable reagents for binding with a polypeptide corresponding to a marker of the invention include antibodies, antibody derivatives, antibody fragments, and the like. Suitable reagents for binding with a
20 nucleic acid (*e.g.* a genomic DNA, an mRNA, a spliced mRNA, a cDNA, or the like) include complementary nucleic acids. For example, the nucleic acid reagents may include oligonucleotides (labeled or non-labeled) fixed to a substrate, labeled oligonucleotides not bound with a substrate, pairs of PCR primers, molecular beacon probes, and the like.

25 The kit of the invention may optionally comprise additional components useful for performing the methods of the invention. By way of example, the kit may comprise fluids (*e.g.* SSC buffer) suitable for annealing complementary nucleic acids or for binding an antibody with a protein with which it specifically binds, one or more sample compartments, an instructional material which describes performance of a method of the
30 invention, a sample of normal ovarian cells, a sample of ovarian cancer cells, and the like.

The invention also includes a method of making an isolated hybridoma which produces an antibody useful for assessing whether patient is afflicted with an ovarian cancer. In this method, a protein corresponding to a marker of the invention or a fragment of the protein is isolated (*e.g.* by purification from a cell in which it is expressed or by transcription and translation of a nucleic acid encoding the protein *in vivo* or *in vitro* using known methods). A vertebrate, preferably a mammal such as a mouse, rat, rabbit, or sheep, is immunized using the isolated protein or fragment thereof. The vertebrate may optionally (and preferably) be immunized at least one additional time with the isolated protein or fragment, so that the vertebrate exhibits a robust immune response to the protein. Splenocytes are isolated from the immunized vertebrate and fused with an immortalized cell line to form hybridomas, using any of a variety of methods well known in the art. Hybridomas formed in this manner are then screened using standard methods to identify one or more hybridomas which produce an antibody which specifically binds with the protein. The invention also includes hybridomas made by this method and antibodies made using such hybridomas. An antibody of the invention may also be used as a therapeutic agent for treating cancers, particularly ovarian cancers (see *e.g.*, Table 8).

The invention also includes a method of assessing the efficacy of a test compound for inhibiting ovarian cancer cells. As described above, differences in the level of expression of the markers of the invention correlate with the cancerous state of ovarian cells. Although it is recognized that changes in the levels of expression of certain of the markers of the invention likely result from the cancerous state of ovarian cells, it is likewise recognized that changes in the levels of expression of other of the markers of the invention induce, maintain, and promote the cancerous state of those cells. Thus, compounds which inhibit an ovarian cancer in a patient will cause the level of expression of one or more of the markers of the invention to change to a level nearer the normal level of expression for that marker (*i.e.* the level of expression for the marker in non-cancerous ovarian cells).

This method thus comprises comparing expression of a marker in a first ovarian cell sample and maintained in the presence of the test compound and expression of the marker in a second ovarian cell sample and maintained in the absence of the test compound. A significant increase in the level of expression of a marker listed in Table

3A, 5, 7C and/or 7E, or a significant decrease in the level of expression of a marker listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and/or 8, is an indication that the test compound inhibits ovarian cancer. The ovarian cell samples may, for example, be aliquots of a single sample of normal ovarian cells obtained from a patient, pooled
5 samples of normal ovarian cells obtained from a patient, cells of a normal ovarian cell line, aliquots of a single sample of ovarian cancer cells obtained from a patient, pooled samples of ovarian cancer cells obtained from a patient, cells of an ovarian cancer cell line, or the like. In one embodiment, the samples are ovarian cancer cells obtained from a patient and a plurality of compounds known to be effective for inhibiting various
10 ovarian cancers are tested in order to identify the compound which is likely to best inhibit the ovarian cancer in the patient.

This method may likewise be used to assess the efficacy of a therapy for inhibiting ovarian cancer in a patient. In this method, the level of expression of one or more markers of the invention in a pair of samples (one subjected to the therapy, the
15 other not subjected to the therapy) is assessed. As with the method of assessing the efficacy of test compounds, if the therapy induces a significant decrease in the level of expression of a marker listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and/or 8, or blocks induction of a marker listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and/or 8, or if the therapy induces a significant enhancement of the level of expression of a
20 marker listed in Tables 3A, 5, 7C and 7E, then the therapy is efficacious for inhibiting ovarian cancer. As above, if samples from a selected patient are used in this method, then alternative therapies can be assessed *in vitro* in order to select a therapy most likely to be efficacious for inhibiting ovarian cancer in the patient.

As described herein, ovarian cancer in patients is associated with an increase in
25 the level of expression of one or more markers listed in either or both of Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and/or 8, with a decrease in the level of expression of one or more markers listed in Table 3A, 5, 7C and 7E, or with both. While, as discussed above, some of these changes in expression level result from occurrence of the ovarian cancer, others of these changes induce, maintain, and promote the cancerous state of ovarian
30 cancer cells. Thus, ovarian cancer characterized by an increase in the level of expression of one or more markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and/or 8 can be inhibited by inhibiting expression of those markers. Likewise, ovarian

cancer characterized by a decrease in the level of expression of one or more markers listed in Table 3A, 5, 7C and 7E can be inhibited by enhancing expression of those markers.

Expression of a marker listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8
5 can be inhibited in a number of ways generally known in the art. For example, an antisense oligonucleotide can be provided to the ovarian cancer cells in order to inhibit transcription, translation, or both, of the marker(s). Alternately, a polynucleotide encoding an antibody, an antibody derivative, or an antibody fragment which specifically binds the protein corresponding to the marker, and operably linked with an
10 appropriate promoter/regulator region, can be provided to the cell in order to generate intracellular antibodies which will inhibit the function or activity of the protein. The expression and/or function of a marker may also be inhibited by treating the ovarian cancer cell with a heterologous antibody or antibody derivative that specifically binds the protein corresponding to the marker. Using the methods described herein, a variety
15 of molecules, particularly including molecules sufficiently small that they are able to cross the cell membrane, can be screened in order to identify molecules which inhibit expression of the marker(s). The compound so identified can be provided to the patient in order to inhibit expression of the marker(s) in the ovarian cancer cells of the patient.

Expression of a marker listed in Tables 3A, 5, 7C and 7E can be enhanced in a
20 number of ways generally known in the art. For example, a polynucleotide encoding the marker and operably linked with an appropriate promoter/regulator region can be provided to ovarian cancer cells of the patient in order to induce enhanced expression of the protein (and mRNA) corresponding to the marker therein. Alternatively, if the protein is capable of crossing the cell membrane, inserting itself in the cell membrane,
25 or is normally a secreted protein, then expression of the protein can be enhanced by providing the protein (*e.g.* directly or by way of the bloodstream or another ovary-associated fluid) to ovarian cancer cells in the patient.

As described above, the cancerous state of human ovarian cells is correlated with changes in the levels of expression of the markers of the invention. Thus, compounds
30 which induce increased expression of one or more of the markers listed in either or both of Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8, decreased expression of one or more of the markers listed in either or both of Tables 3A, 5, 7C and 7E, or both, can induce

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ovarian cell carcinogenesis. The invention includes a method for assessing the human ovarian cell carcinogenic potential of a test compound. This method comprises maintaining separate aliquots of human ovarian cells in the presence and absence of the test compound. Expression of a marker of the invention in each of the aliquots is compared. A significant increase in the level of expression of a marker listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8, or a significant decrease in the level of expression of a marker listed in Tables 3A, 5, 7C and 7E in the aliquot maintained in the presence of the test compound (relative to the aliquot maintained in the absence of the test compound) is an indication that the test compound possesses human ovarian cell carcinogenic potential. The relative carcinogenic potentials of various test compounds can be assessed by comparing the degree of enhancement or inhibition of the level of expression of the relevant markers, by comparing the number of markers for which the level of expression is enhanced or inhibited, or by comparing both.

Various aspects of the invention are described in further detail in the following subsections.

I. Isolated Nucleic Acid Molecules

One aspect of the invention pertains to isolated nucleic acid molecules that correspond to a marker of the invention, including nucleic acids which encode a polypeptide corresponding to a marker of the invention or a portion of such a polypeptide. Isolated nucleic acids of the invention also include nucleic acid molecules sufficient for use as hybridization probes to identify nucleic acid molecules that correspond to a marker of the invention, including nucleic acids which encode a polypeptide corresponding to a marker of the invention, and fragments of such nucleic acid molecules, *e.g.*, those suitable for use as PCR primers for the amplification or mutation of nucleic acid molecules. As used herein, the term "nucleic acid molecule" is intended to include DNA molecules (*e.g.*, cDNA or genomic DNA) and RNA molecules (*e.g.*, mRNA) and analogs of the DNA or RNA generated using nucleotide analogs. The nucleic acid molecule can be single-stranded or double-stranded, but preferably is double-stranded DNA.

An "isolated" nucleic acid molecule is one which is separated from other nucleic acid molecules which are present in the natural source of the nucleic acid molecule. Preferably, an "isolated" nucleic acid molecule comprises a protein-coding sequence and is free of sequences which naturally flank the coding sequence in the genomic DNA of the organism from which the nucleic acid is derived. For example, in various
5 embodiments, the isolated nucleic acid molecule can contain less than about 5 kB, 4 kB, 3 kB, 2 kB, 1 kB, 0.5 kB or 0.1 kB of nucleotide sequences which naturally flank the nucleic acid molecule in genomic DNA of the cell from which the nucleic acid is derived. Moreover, an "isolated" nucleic acid molecule, such as a cDNA molecule, can
10 be substantially free of other cellular material, or culture medium when produced by recombinant techniques, or substantially free of chemical precursors or other chemicals when chemically synthesized.

A nucleic acid molecule of the present invention, *e.g.*, a nucleic acid encoding a protein corresponding to a marker listed in one or more of Tables I-III, can be isolated
15 using standard molecular biology techniques and the sequence information in the database records described herein. Using all or a portion of such nucleic acid sequences, nucleic acid molecules of the invention can be isolated using standard hybridization and cloning techniques (*e.g.*, as described in Sambrook *et al.*, ed., *Molecular Cloning: A Laboratory Manual*, 2nd ed., Cold Spring Harbor Laboratory Press, Cold Spring
20 Harbor, NY, 1989).

A nucleic acid molecule of the invention can be amplified using cDNA, mRNA, or genomic DNA as a template and appropriate oligonucleotide primers according to standard PCR amplification techniques. The nucleic acid so amplified can be cloned into an appropriate vector and characterized by DNA sequence analysis. Furthermore,
25 oligonucleotides corresponding to all or a portion of a nucleic acid molecule of the invention can be prepared by standard synthetic techniques, *e.g.*, using an automated DNA synthesizer.

In another preferred embodiment, an isolated nucleic acid molecule of the invention comprises a nucleic acid molecule which has a nucleotide sequence
30 complementary to the nucleotide sequence of a nucleic acid corresponding to a marker of the invention or to the nucleotide sequence of a nucleic acid encoding a protein which corresponds to a marker of the invention. A nucleic acid molecule which is

complementary to a given nucleotide sequence is one which is sufficiently complementary to the given nucleotide sequence that it can hybridize to the given nucleotide sequence thereby forming a stable duplex.

Moreover, a nucleic acid molecule of the invention can comprise only a portion
5 of a nucleic acid sequence, wherein the full length nucleic acid sequence comprises a marker of the invention or which encodes a polypeptide corresponding to a marker of the invention. Such nucleic acids can be used, for example, as a probe or primer. The probe/primer typically is used as one or more substantially purified oligonucleotides. The oligonucleotide typically comprises a region of nucleotide sequence that hybridizes
10 under stringent conditions to at least about 7, preferably about 15, more preferably about 25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, or 400 or more consecutive nucleotides of a nucleic acid of the invention.

Probes based on the sequence of a nucleic acid molecule of the invention can be used to detect transcripts or genomic sequences corresponding to one or more markers
15 of the invention. The probe comprises a label group attached thereto, *e.g.*, a radioisotope, a fluorescent compound, an enzyme, or an enzyme co-factor. Such probes can be used as part of a diagnostic test kit for identifying cells or tissues which mis-express the protein, such as by measuring levels of a nucleic acid molecule encoding the protein in a sample of cells from a subject, *e.g.*, detecting mRNA levels or determining
20 whether a gene encoding the protein has been mutated or deleted.

The invention further encompasses nucleic acid molecules that differ, due to degeneracy of the genetic code, from the nucleotide sequence of nucleic acids encoding a protein which corresponds to a marker of the invention, and thus encode the same protein.

25 In addition to the nucleotide sequences described in the GenBank and IMAGE Consortium database records described herein, it will be appreciated by those skilled in the art that DNA sequence polymorphisms that lead to changes in the amino acid sequence can exist within a population (*e.g.*, the human population). Such genetic polymorphisms can exist among individuals within a population due to natural allelic
30 variation. An allele is one of a group of genes which occur alternatively at a given genetic locus. In addition, it will be appreciated that DNA polymorphisms that affect

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RNA expression levels can also exist that may affect the overall expression level of that gene (e.g., by affecting regulation or degradation).

As used herein, the phrase "allelic variant" refers to a nucleotide sequence which occurs at a given locus or to a polypeptide encoded by the nucleotide sequence.

5 As used herein, the terms "gene" and "recombinant gene" refer to nucleic acid molecules comprising an open reading frame encoding a polypeptide corresponding to a marker of the invention. Such natural allelic variations can typically result in 0.1 –0.5 % variance in the nucleotide sequence of a given gene. Alternative alleles can be identified by sequencing the gene of interest in a number of different individuals.

10 This can be readily carried out by using hybridization probes to identify the same genetic locus in a variety of individuals. Any and all such nucleotide variations and resulting amino acid polymorphisms or variations that are the result of natural allelic variation and that do not alter the functional activity are intended to be within the scope of the invention.

15 In another embodiment, an isolated nucleic acid molecule of the invention is at least 7, 15, 20, 25, 30, 40, 60, 80, 100, 150, 200, 250, 300, 350, 400, 450, 550, 650, 700, 800, 900, 1000, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800, 3000, 3500, 4000, 4500, or more nucleotides in length and hybridizes under stringent conditions to a nucleic acid corresponding to a marker of the invention or to a nucleic acid encoding a
20 protein corresponding to a marker of the invention. As used herein, the term "hybridizes under stringent conditions" is intended to describe conditions for hybridization and washing under which nucleotide sequences at least 75% (80%, 85%, preferably 90%) identical to each other typically remain hybridized to each other. Such stringent conditions are known to those skilled in the art and can be found in sections 6.3.1-6.3.6
25 of *Current Protocols in Molecular Biology*, John Wiley & Sons, N.Y. (1989). A preferred, non-limiting example of stringent hybridization conditions for annealing two single-stranded DNA each of which is at least about 100 bases in length and/or for annealing a single-stranded DNA and a single-stranded RNA each of which is at least about 100 bases in length, are hybridization in 6X sodium chloride/sodium citrate (SSC) at about 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C.
30 Further preferred hybridization conditions are taught in Lockhart, *et al.*, *Nature Biotechnology*, Volume 14, 1996 August:1675-1680; Breslauer, *et al.*, *Proc. Natl. Acad.*

Sci. USA, Volume 83, 1986 June: 3746-3750; Van Ness, *et al.*, Nucleic Acids Research, Volume 19, No. 19, 1991 September: 5143-5151; McGraw, *et al.*, BioTechniques, Volume 8, No. 6 1990: 674-678; and Milner, *et al.*, Nature Biotechnology, Volume 15, 1997 June: 537-541, all expressly incorporated by reference.

5 In addition to naturally-occurring allelic variants of a nucleic acid molecule of the invention that can exist in the population, the skilled artisan will further appreciate that sequence changes can be introduced by mutation thereby leading to changes in the amino acid sequence of the encoded protein, without altering the biological activity of the protein encoded thereby. For example, one can make nucleotide substitutions
10 leading to amino acid substitutions at "non-essential" amino acid residues. A "non-essential" amino acid residue is a residue that can be altered from the wild-type sequence without altering the biological activity, whereas an "essential" amino acid residue is required for biological activity. For example, amino acid residues that are not conserved or only semi-conserved among homologs of various species may be non-
15 essential for activity and thus would be likely targets for alteration. Alternatively, amino acid residues that are conserved among the homologs of various species (*e.g.*, murine and human) may be essential for activity and thus would not be likely targets for alteration.

 Accordingly, another aspect of the invention pertains to nucleic acid molecules
20 encoding a polypeptide of the invention that contain changes in amino acid residues that are not essential for activity. Such polypeptides differ in amino acid sequence from the naturally-occurring proteins which correspond to the markers of the invention, yet retain biological activity. In one embodiment, such a protein has an amino acid sequence that is at least about 40% identical, 50%, 60%, 70%, 80%, 90%, 95%, or 98% identical to the
25 amino acid sequence of one of the proteins which correspond to the markers of the invention.

 An isolated nucleic acid molecule encoding a variant protein can be created by introducing one or more nucleotide substitutions, additions or deletions into the nucleotide sequence of nucleic acids of the invention, such that one or more amino acid
30 residue substitutions, additions, or deletions are introduced into the encoded protein. Mutations can be introduced by standard techniques, such as site-directed mutagenesis and PCR-mediated mutagenesis. Preferably, conservative amino acid substitutions are

made at one or more predicted non-essential amino acid residues. A "conservative amino acid substitution" is one in which the amino acid residue is replaced with an amino acid residue having a similar side chain. Families of amino acid residues having similar side chains have been defined in the art. These families include amino acids with basic side chains (*e.g.*, lysine, arginine, histidine), acidic side chains (*e.g.*, aspartic acid, glutamic acid), uncharged polar side chains (*e.g.*, glycine, asparagine, glutamine, serine, threonine, tyrosine, cysteine), non-polar side chains (*e.g.*, alanine, valine, leucine, isoleucine, proline, phenylalanine, methionine, tryptophan), beta-branched side chains (*e.g.*, threonine, valine, isoleucine) and aromatic side chains (*e.g.*, tyrosine, phenylalanine, tryptophan, histidine). Alternatively, mutations can be introduced randomly along all or part of the coding sequence, such as by saturation mutagenesis, and the resultant mutants can be screened for biological activity to identify mutants that retain activity. Following mutagenesis, the encoded protein can be expressed recombinantly and the activity of the protein can be determined.

The present invention encompasses antisense nucleic acid molecules, *i.e.*, molecules which are complementary to a sense nucleic acid of the invention, *e.g.*, complementary to the coding strand of a double-stranded cDNA molecule corresponding to a marker of the invention or complementary to an mRNA sequence corresponding to a marker of the invention. Accordingly, an antisense nucleic acid of the invention can hydrogen bond to (*i.e.* anneal with) a sense nucleic acid of the invention. The antisense nucleic acid can be complementary to an entire coding strand, or to only a portion thereof, *e.g.*, all or part of the protein coding region (or open reading frame). An antisense nucleic acid molecule can also be antisense to all or part of a non-coding region of the coding strand of a nucleotide sequence encoding a polypeptide of the invention. The non-coding regions ("5' and 3' untranslated regions") are the 5' and 3' sequences which flank the coding region and are not translated into amino acids.

An antisense oligonucleotide can be, for example, about 5, 10, 15, 20, 25, 30, 35, 40, 45, or 50 or more nucleotides in length. An antisense nucleic acid of the invention can be constructed using chemical synthesis and enzymatic ligation reactions using procedures known in the art. For example, an antisense nucleic acid (*e.g.*, an antisense oligonucleotide) can be chemically synthesized using naturally occurring nucleotides or variously modified nucleotides designed to increase the biological stability of the

molecules or to increase the physical stability of the duplex formed between the antisense and sense nucleic acids, *e.g.*, phosphorothioate derivatives and acridine substituted nucleotides can be used. Examples of modified nucleotides which can be used to generate the antisense nucleic acid include 5-fluorouracil, 5-bromouracil, 5-chlorouracil, 5-iodouracil, hypoxanthine, xanthine, 4-acetylcytosine, 5-
5 (carboxyhydroxymethyl) uracil, 5-carboxymethylaminomethyl-2-thiouridine, 5-carboxymethylaminomethyluracil, dihydrouracil, beta-D-galactosylqueosine, inosine, N6-isopentenyladenine, 1-methylguanine, 1-methylinosine, 2,2-dimethylguanine, 2-methyladenine, 2-methylguanine, 3-methylcytosine, 5-methylcytosine, N6-adenine, 7-
10 methylguanine, 5-methylaminomethyluracil, 5-methoxyaminomethyl-2-thiouracil, beta-D-mannosylqueosine, 5'-methoxycarboxymethyluracil, 5-methoxyuracil, 2-methylthio-N6-isopentenyladenine, uracil-5-oxyacetic acid (v), wybutoxosine, pseudouracil, queosine, 2-thiocytosine, 5-methyl-2-thiouracil, 2-thiouracil, 4-thiouracil, 5-methyluracil, uracil-5-oxyacetic acid methylester, uracil-5-oxyacetic acid (v), 5-methyl-
15 2-thiouracil, 3-(3-amino-3-N-2-carboxypropyl) uracil, (acp3)w, and 2,6-diaminopurine. Alternatively, the antisense nucleic acid can be produced biologically using an expression vector into which a nucleic acid has been sub-cloned in an antisense orientation (*i.e.*, RNA transcribed from the inserted nucleic acid will be of an antisense orientation to a target nucleic acid of interest, described further in the following
20 subsection).

The antisense nucleic acid molecules of the invention are typically administered to a subject or generated *in situ* such that they hybridize with or bind to cellular mRNA and/or genomic DNA encoding a polypeptide corresponding to a selected marker of the invention to thereby inhibit expression of the marker, *e.g.*, by inhibiting transcription
25 and/or translation. The hybridization can be by conventional nucleotide complementarity to form a stable duplex, or, for example, in the case of an antisense nucleic acid molecule which binds to DNA duplexes, through specific interactions in the major groove of the double helix. Examples of a route of administration of antisense nucleic acid molecules of the invention includes direct injection at a tissue site or
30 infusion of the antisense nucleic acid into an ovary-associated body fluid. Alternatively, antisense nucleic acid molecules can be modified to target selected cells and then administered systemically. For example, for systemic administration, antisense

molecules can be modified such that they specifically bind to receptors or antigens expressed on a selected cell surface, *e.g.*, by linking the antisense nucleic acid molecules to peptides or antibodies which bind to cell surface receptors or antigens. The antisense nucleic acid molecules can also be delivered to cells using the vectors described herein.

- 5 To achieve sufficient intracellular concentrations of the antisense molecules, vector constructs in which the antisense nucleic acid molecule is placed under the control of a strong pol II or pol III promoter are preferred.

An antisense nucleic acid molecule of the invention can be an α -anomeric nucleic acid molecule. An α -anomeric nucleic acid molecule forms specific double-
10 stranded hybrids with complementary RNA in which, contrary to the usual α -units, the strands run parallel to each other (Gaultier *et al.*, 1987, *Nucleic Acids Res.* 15:6625-6641). The antisense nucleic acid molecule can also comprise a 2'-o-methylribonucleotide (Inoue *et al.*, 1987, *Nucleic Acids Res.* 15:6131-6148) or a chimeric RNA-DNA analogue (Inoue *et al.*, 1987, *FEBS Lett.* 215:327-330).

15 The invention also encompasses ribozymes. Ribozymes are catalytic RNA molecules with ribonuclease activity which are capable of cleaving a single-stranded nucleic acid, such as an mRNA, to which they have a complementary region. Thus, ribozymes (*e.g.*, hammerhead ribozymes as described in Haselhoff and Gerlach, 1988, *Nature* 334:585-591) can be used to catalytically cleave mRNA transcripts to thereby
20 inhibit translation of the protein encoded by the mRNA. A ribozyme having specificity for a nucleic acid molecule encoding a polypeptide corresponding to a marker of the invention can be designed based upon the nucleotide sequence of a cDNA corresponding to the marker. For example, a derivative of a *Tetrahymena* L-19 IVS RNA can be constructed in which the nucleotide sequence of the active site is
25 complementary to the nucleotide sequence to be cleaved (see Cech *et al.* U.S. Patent No. 4,987,071; and Cech *et al.* U.S. Patent No. 5,116,742). Alternatively, an mRNA encoding a polypeptide of the invention can be used to select a catalytic RNA having a specific ribonuclease activity from a pool of RNA molecules (see, *e.g.*, Bartel and Szostak, 1993, *Science* 261:1411-1418).

30 The invention also encompasses nucleic acid molecules which form triple helical structures. For example, expression of a polypeptide of the invention can be inhibited by targeting nucleotide sequences complementary to the regulatory region of the gene

encoding the polypeptide (*e.g.*, the promoter and/or enhancer) to form triple helical structures that prevent transcription of the gene in target cells. See generally Helene (1991) *Anticancer Drug Des.* 6(6):569-84; Helene (1992) *Ann. N.Y. Acad. Sci.* 660:27-36; and Maher (1992) *Bioassays* 14(12):807-15.

5 In various embodiments, the nucleic acid molecules of the invention can be modified at the base moiety, sugar moiety or phosphate backbone to improve, *e.g.*, the stability, hybridization, or solubility of the molecule. For example, the deoxyribose phosphate backbone of the nucleic acids can be modified to generate peptide nucleic acids (see Hyrup *et al.*, 1996, *Bioorganic & Medicinal Chemistry* 4(1): 5-23). As used
10 herein, the terms "peptide nucleic acids" or "PNAs" refer to nucleic acid mimics, *e.g.*, DNA mimics, in which the deoxyribose phosphate backbone is replaced by a pseudo-peptide backbone and only the four natural nucleobases are retained. The neutral backbone of PNAs has been shown to allow for specific hybridization to DNA and RNA under conditions of low ionic strength. The synthesis of PNA oligomers can be
15 performed using standard solid phase peptide synthesis protocols as described in Hyrup *et al.* (1996), *supra*; Perry-O'Keefe *et al.* (1996) *Proc. Natl. Acad. Sci. USA* 93:14670-675.

 PNAs can be used in therapeutic and diagnostic applications. For example, PNAs can be used as antisense or antigene agents for sequence-specific modulation of
20 gene expression by, *e.g.*, inducing transcription or translation arrest or inhibiting replication. PNAs can also be used, *e.g.*, in the analysis of single base pair mutations in a gene by, *e.g.*, PNA directed PCR clamping; as artificial restriction enzymes when used in combination with other enzymes, *e.g.*, S1 nucleases (Hyrup (1996), *supra*; or as probes or primers for DNA sequence and hybridization (Hyrup, 1996, *supra*; Perry-
25 O'Keefe *et al.*, 1996, *Proc. Natl. Acad. Sci. USA* 93:14670-675).

 In another embodiment, PNAs can be modified, *e.g.*, to enhance their stability or cellular uptake, by attaching lipophilic or other helper groups to PNA, by the formation of PNA-DNA chimeras, or by the use of liposomes or other techniques of drug delivery known in the art. For example, PNA-DNA chimeras can be generated which can
30 combine the advantageous properties of PNA and DNA. Such chimeras allow DNA recognition enzymes, *e.g.*, RNASE H and DNA polymerases, to interact with the DNA portion while the PNA portion would provide high binding affinity and specificity.

PNA-DNA chimeras can be linked using linkers of appropriate lengths selected in terms of base stacking, number of bonds between the nucleobases, and orientation (Hyrup, 1996, *supra*). The synthesis of PNA-DNA chimeras can be performed as described in Hyrup (1996), *supra*, and Finn *et al.* (1996) *Nucleic Acids Res.* 24(17):3357-63. For example, a DNA chain can be synthesized on a solid support using standard phosphoramidite coupling chemistry and modified nucleoside analogs. Compounds such as 5'-(4-methoxytrityl)amino-5'-deoxy-thymidine phosphoramidite can be used as a link between the PNA and the 5' end of DNA (Mag *et al.*, 1989, *Nucleic Acids Res.* 17:5973-88). PNA monomers are then coupled in a step-wise manner to produce a chimeric molecule with a 5' PNA segment and a 3' DNA segment (Finn *et al.*, 1996, *Nucleic Acids Res.* 24(17):3357-63). Alternatively, chimeric molecules can be synthesized with a 5' DNA segment and a 3' PNA segment (Peterser *et al.*, 1975, *Bioorganic Med. Chem. Lett.* 5:1119-11124).

In other embodiments, the oligonucleotide can include other appended groups such as peptides (*e.g.*, for targeting host cell receptors *in vivo*), or agents facilitating transport across the cell membrane (see, *e.g.*, Letsinger *et al.*, 1989, *Proc. Natl. Acad. Sci. USA* 86:6553-6556; Lemaitre *et al.*, 1987, *Proc. Natl. Acad. Sci. USA* 84:648-652; PCT Publication No. WO 88/09810) or the blood-brain barrier (see, *e.g.*, PCT Publication No. WO 89/10134). In addition, oligonucleotides can be modified with hybridization-triggered cleavage agents (see, *e.g.*, Krol *et al.*, 1988, *Bio/Techniques* 6:958-976) or intercalating agents (see, *e.g.*, Zon, 1988, *Pharm. Res.* 5:539-549). To this end, the oligonucleotide can be conjugated to another molecule, *e.g.*, a peptide, hybridization triggered cross-linking agent, transport agent, hybridization-triggered cleavage agent, etc.

The invention also includes molecular beacon nucleic acids having at least one region which is complementary to a nucleic acid of the invention, such that the molecular beacon is useful for quantitating the presence of the nucleic acid of the invention in a sample. A "molecular beacon" nucleic acid is a nucleic acid comprising a pair of complementary regions and having a fluorophore and a fluorescent quencher associated therewith. The fluorophore and quencher are associated with different portions of the nucleic acid in such an orientation that when the complementary regions are annealed with one another, fluorescence of the fluorophore is quenched by the

quencher. When the complementary regions of the nucleic acid are not annealed with one another, fluorescence of the fluorophore is quenched to a lesser degree. Molecular beacon nucleic acids are described, for example, in U.S. Patent 5,876,930.

5 II. Isolated Proteins and Antibodies

One aspect of the invention pertains to isolated proteins which correspond to individual markers of the invention, and biologically active portions thereof, as well as polypeptide fragments suitable for use as immunogens to raise antibodies directed against a polypeptide corresponding to a marker of the invention. In one embodiment,
10 the native polypeptide corresponding to a marker can be isolated from cells or tissue sources by an appropriate purification scheme using standard protein purification techniques. In another embodiment, polypeptides corresponding to a marker of the invention are produced by recombinant DNA techniques. Alternative to recombinant expression, a polypeptide corresponding to a marker of the invention can be synthesized
15 chemically using standard peptide synthesis techniques.

An "isolated" or "purified" protein or biologically active portion thereof is substantially free of cellular material or other contaminating proteins from the cell or tissue source from which the protein is derived, or substantially free of chemical precursors or other chemicals when chemically synthesized. The language
20 "substantially free of cellular material" includes preparations of protein in which the protein is separated from cellular components of the cells from which it is isolated or recombinantly produced. Thus, protein that is substantially free of cellular material includes preparations of protein having less than about 30%, 20%, 10%, or 5% (by dry weight) of heterologous protein (also referred to herein as a "contaminating protein").
25 When the protein or biologically active portion thereof is recombinantly produced, it is also preferably substantially free of culture medium, *i.e.*, culture medium represents less than about 20%, 10%, or 5% of the volume of the protein preparation. When the protein is produced by chemical synthesis, it is preferably substantially free of chemical precursors or other chemicals, *i.e.*, it is separated from chemical precursors or other
30 chemicals which are involved in the synthesis of the protein. Accordingly such preparations of the protein have less than about 30%, 20%, 10%, 5% (by dry weight) of chemical precursors or compounds other than the polypeptide of interest.

Biologically active portions of a polypeptide corresponding to a marker of the invention include polypeptides comprising amino acid sequences sufficiently identical to or derived from the amino acid sequence of the protein corresponding to the marker (*e.g.*, the amino acid sequence listed in the GenBank and IMAGE Consortium database records described herein), which include fewer amino acids than the full length protein, and exhibit at least one activity of the corresponding full-length protein. Typically, biologically active portions comprise a domain or motif with at least one activity of the corresponding protein. A biologically active portion of a protein of the invention can be a polypeptide which is, for example, 10, 25, 50, 100 or more amino acids in length.

Moreover, other biologically active portions, in which other regions of the protein are deleted, can be prepared by recombinant techniques and evaluated for one or more of the functional activities of the native form of a polypeptide of the invention.

Preferred polypeptides have the amino acid sequence listed in the one of the GenBank and IMAGE Consortium database records described herein. Other useful proteins are substantially identical (*e.g.*, at least about 40%, preferably 50%, 60%, 70%, 80%, 90%, 95%, or 99%) to one of these sequences and retain the functional activity of the protein of the corresponding naturally-occurring protein yet differ in amino acid sequence due to natural allelic variation or mutagenesis.

To determine the percent identity of two amino acid sequences or of two nucleic acids, the sequences are aligned for optimal comparison purposes (*e.g.*, gaps can be introduced in the sequence of a first amino acid or nucleic acid sequence for optimal alignment with a second amino or nucleic acid sequence). The amino acid residues or nucleotides at corresponding amino acid positions or nucleotide positions are then compared. When a position in the first sequence is occupied by the same amino acid residue or nucleotide as the corresponding position in the second sequence, then the molecules are identical at that position. The percent identity between the two sequences is a function of the number of identical positions shared by the sequences (*i.e.*, % identity = # of identical positions/total # of positions (*e.g.*, overlapping positions) x100). In one embodiment the two sequences are the same length.

The determination of percent identity between two sequences can be accomplished using a mathematical algorithm. A preferred, non-limiting example of a mathematical algorithm utilized for the comparison of two sequences is the algorithm of

Karlin and Altschul (1990) *Proc. Natl. Acad. Sci. USA* 87:2264-2268, modified as in Karlin and Altschul (1993) *Proc. Natl. Acad. Sci. USA* 90:5873-5877. Such an algorithm is incorporated into the NBLAST and XBLAST programs of Altschul, *et al.* (1990) *J. Mol. Biol.* 215:403-410. BLAST nucleotide searches can be performed with the NBLAST program, score = 100, wordlength = 12 to obtain nucleotide sequences homologous to a nucleic acid molecules of the invention. BLAST protein searches can be performed with the XBLAST program, score = 50, wordlength = 3 to obtain amino acid sequences homologous to a protein molecules of the invention. To obtain gapped alignments for comparison purposes, Gapped BLAST can be utilized as described in Altschul *et al.* (1997) *Nucleic Acids Res.* 25:3389-3402. Alternatively, PSI-Blast can be used to perform an iterated search which detects distant relationships between molecules. When utilizing BLAST, Gapped BLAST, and PSI-Blast programs, the default parameters of the respective programs (*e.g.*, XBLAST and NBLAST) can be used. See <http://www.ncbi.nlm.nih.gov>. Another preferred, non-limiting example of a mathematical algorithm utilized for the comparison of sequences is the algorithm of Myers and Miller, (1988) *Comput Appl Biosci*, 4:11-7. Such an algorithm is incorporated into the ALIGN program (version 2.0) which is part of the GCG sequence alignment software package. When utilizing the ALIGN program for comparing amino acid sequences, a PAM120 weight residue table, a gap length penalty of 12, and a gap penalty of 4 can be used. Yet another useful algorithm for identifying regions of local sequence similarity and alignment is the FASTA algorithm as described in Pearson and Lipman (1988) *Proc. Natl. Acad. Sci. USA* 85:2444-2448. When using the FASTA algorithm for comparing nucleotide or amino acid sequences, a PAM120 weight residue table can, for example, be used with a *k*-tuple value of 2.

25 The percent identity between two sequences can be determined using techniques similar to those described above, with or without allowing gaps. In calculating percent identity, only exact matches are counted.

30 The invention also provides chimeric or fusion proteins corresponding to a marker of the invention. As used herein, a "chimeric protein" or "fusion protein" comprises all or part (preferably a biologically active part) of a polypeptide corresponding to a marker of the invention operably linked to a heterologous polypeptide (*i.e.*, a polypeptide other than the polypeptide corresponding to the marker).

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Within the fusion protein, the term "operably linked" is intended to indicate that the polypeptide of the invention and the heterologous polypeptide are fused in-frame to each other. The heterologous polypeptide can be fused to the amino-terminus or the carboxyl-terminus of the polypeptide of the invention.

5 One useful fusion protein is a GST fusion protein in which a polypeptide corresponding to a marker of the invention is fused to the carboxyl terminus of GST sequences. Such fusion proteins can facilitate the purification of a recombinant polypeptide of the invention.

10 In another embodiment, the fusion protein contains a heterologous signal sequence at its amino terminus. For example, the native signal sequence of a polypeptide corresponding to a marker of the invention can be removed and replaced with a signal sequence from another protein. For example, the gp67 secretory sequence of the baculovirus envelope protein can be used as a heterologous signal sequence (Ausubel *et al.*, ed., *Current Protocols in Molecular Biology*, John Wiley & Sons, NY,
15 1992). Other examples of eukaryotic heterologous signal sequences include the secretory sequences of melittin and human placental alkaline phosphatase (Stratagene; La Jolla, California). In yet another example, useful prokaryotic heterologous signal sequences include the *phoA* secretory signal (Sambrook *et al.*, *supra*) and the protein A secretory signal (Pharmacia Biotech; Piscataway, New Jersey).

20 In yet another embodiment, the fusion protein is an immunoglobulin fusion protein in which all or part of a polypeptide corresponding to a marker of the invention is fused to sequences derived from a member of the immunoglobulin protein family. The immunoglobulin fusion proteins of the invention can be incorporated into pharmaceutical compositions and administered to a subject to inhibit an interaction
25 between a ligand (soluble or membrane-bound) and a protein on the surface of a cell (receptor), to thereby suppress signal transduction *in vivo*. The immunoglobulin fusion protein can be used to affect the bioavailability of a cognate ligand of a polypeptide of the invention. Inhibition of ligand/receptor interaction can be useful therapeutically, both for treating proliferative and differentiative disorders and for modulating (*e.g.*
30 promoting or inhibiting) cell survival. Moreover, the immunoglobulin fusion proteins of the invention can be used as immunogens to produce antibodies directed against a

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polypeptide of the invention in a subject, to purify ligands and in screening assays to identify molecules which inhibit the interaction of receptors with ligands.

Chimeric and fusion proteins of the invention can be produced by standard recombinant DNA techniques. In another embodiment, the fusion gene can be synthesized by conventional techniques including automated DNA synthesizers. Alternatively, PCR amplification of gene fragments can be carried out using anchor primers which give rise to complementary overhangs between two consecutive gene fragments which can subsequently be annealed and re-amplified to generate a chimeric gene sequence (see, *e.g.*, Ausubel *et al.*, *supra*). Moreover, many expression vectors are commercially available that already encode a fusion moiety (*e.g.*, a GST polypeptide). A nucleic acid encoding a polypeptide of the invention can be cloned into such an expression vector such that the fusion moiety is linked in-frame to the polypeptide of the invention.

A signal sequence can be used to facilitate secretion and isolation of the secreted protein or other proteins of interest. Signal sequences are typically characterized by a core of hydrophobic amino acids which are generally cleaved from the mature protein during secretion in one or more cleavage events. Such signal peptides contain processing sites that allow cleavage of the signal sequence from the mature proteins as they pass through the secretory pathway. Thus, the invention pertains to the described polypeptides having a signal sequence, as well as to polypeptides from which the signal sequence has been proteolytically cleaved (*i.e.*, the cleavage products). In one embodiment, a nucleic acid sequence encoding a signal sequence can be operably linked in an expression vector to a protein of interest, such as a protein which is ordinarily not secreted or is otherwise difficult to isolate. The signal sequence directs secretion of the protein, such as from a eukaryotic host into which the expression vector is transformed, and the signal sequence is subsequently or concurrently cleaved. The protein can then be readily purified from the extracellular medium by art recognized methods. Alternatively, the signal sequence can be linked to the protein of interest using a sequence which facilitates purification, such as with a GST domain.

The present invention also pertains to variants of the polypeptides corresponding to individual markers of the invention. Such variants have an altered amino acid sequence which can function as either agonists (mimetics) or as antagonists. Variants

can be generated by mutagenesis, *e.g.*, discrete point mutation or truncation. An agonist can retain substantially the same, or a subset, of the biological activities of the naturally occurring form of the protein. An antagonist of a protein can inhibit one or more of the activities of the naturally occurring form of the protein by, for example, competitively
5 binding to a downstream or upstream member of a cellular signaling cascade which includes the protein of interest. Thus, specific biological effects can be elicited by treatment with a variant of limited function. Treatment of a subject with a variant having a subset of the biological activities of the naturally occurring form of the protein can have fewer side effects in a subject relative to treatment with the naturally occurring
10 form of the protein.

Variants of a protein of the invention which function as either agonists (mimetics) or as antagonists can be identified by screening combinatorial libraries of mutants, *e.g.*, truncation mutants, of the protein of the invention for agonist or antagonist activity. In one embodiment, a variegated library of variants is generated by
15 combinatorial mutagenesis at the nucleic acid level and is encoded by a variegated gene library. A variegated library of variants can be produced by, for example, enzymatically ligating a mixture of synthetic oligonucleotides into gene sequences such that a degenerate set of potential protein sequences is expressible as individual polypeptides, or alternatively, as a set of larger fusion proteins (*e.g.*, for phage display). There are a
20 variety of methods which can be used to produce libraries of potential variants of the polypeptides of the invention from a degenerate oligonucleotide sequence. Methods for synthesizing degenerate oligonucleotides are known in the art (see, *e.g.*, Narang, 1983, *Tetrahedron* 39:3; Itakura *et al.*, 1984, *Annu. Rev. Biochem.* 53:323; Itakura *et al.*, 1984, *Science* 198:1056; Ike *et al.*, 1983 *Nucleic Acid Res.* 11:477).

25 In addition, libraries of fragments of the coding sequence of a polypeptide corresponding to a marker of the invention can be used to generate a variegated population of polypeptides for screening and subsequent selection of variants. For example, a library of coding sequence fragments can be generated by treating a double stranded PCR fragment of the coding sequence of interest with a nuclease under
30 conditions wherein nicking occurs only about once per molecule, denaturing the double stranded DNA, renaturing the DNA to form double stranded DNA which can include sense/antisense pairs from different nicked products, removing single stranded portions

from reformed duplexes by treatment with S1 nuclease, and ligating the resulting fragment library into an expression vector. By this method, an expression library can be derived which encodes amino terminal and internal fragments of various sizes of the protein of interest.

- 5 Several techniques are known in the art for screening gene products of combinatorial libraries made by point mutations or truncation, and for screening cDNA libraries for gene products having a selected property. The most widely used techniques, which are amenable to high through-put analysis, for screening large gene libraries typically include cloning the gene library into replicable expression vectors, transforming appropriate cells with the resulting library of vectors, and expressing the combinatorial genes under conditions in which detection of a desired activity facilitates isolation of the vector encoding the gene whose product was detected. Recursive ensemble mutagenesis (REM), a technique which enhances the frequency of functional mutants in the libraries, can be used in combination with the screening assays to identify variants of a protein of the invention (Arkin and Yourvan, 1992, *Proc. Natl. Acad. Sci. USA* 89:7811-7815; Delgrave *et al.*, 1993, *Protein Engineering* 6(3):327- 331).

- An isolated polypeptide corresponding to a marker of the invention, or a fragment thereof, can be used as an immunogen to generate antibodies using standard techniques for polyclonal and monoclonal antibody preparation. The full-length polypeptide or protein can be used or, alternatively, the invention provides antigenic peptide fragments for use as immunogens. The antigenic peptide of a protein of the invention comprises at least 8 (preferably 10, 15, 20, or 30 or more) amino acid residues of the amino acid sequence of one of the polypeptides of the invention, and encompasses an epitope of the protein such that an antibody raised against the peptide forms a specific immune complex with a marker of the invention to which the protein corresponds. Preferred epitopes encompassed by the antigenic peptide are regions that are located on the surface of the protein, *e.g.*, hydrophilic regions. Hydrophobicity sequence analysis, hydrophilicity sequence analysis, or similar analyses can be used to identify hydrophilic regions.

- 30 An immunogen typically is used to prepare antibodies by immunizing a suitable (*i.e.* immunocompetent) subject such as a rabbit, goat, mouse, or other mammal or vertebrate. An appropriate immunogenic preparation can contain, for example,

recombinantly-expressed or chemically-synthesized polypeptide. The preparation can further include an adjuvant, such as Freund's complete or incomplete adjuvant, or a similar immunostimulatory agent.

Accordingly, another aspect of the invention pertains to antibodies directed
5 against a polypeptide of the invention. The terms "antibody" and "antibody substance" as used interchangeably herein refer to immunoglobulin molecules and immunologically active portions of immunoglobulin molecules, *i.e.*, molecules that contain an antigen binding site which specifically binds an antigen, such as a polypeptide of the invention, *e.g.*, an epitope of a polypeptide of the invention. A molecule which specifically binds
10 to a given polypeptide of the invention is a molecule which binds the polypeptide, but does not substantially bind other molecules in a sample, *e.g.*, a biological sample, which naturally contains the polypeptide. Examples of immunologically active portions of immunoglobulin molecules include F(ab) and F(ab')₂ fragments which can be generated by treating the antibody with an enzyme such as pepsin. The invention provides
15 polyclonal and monoclonal antibodies. The term "monoclonal antibody" or "monoclonal antibody composition", as used herein, refers to a population of antibody molecules that contain only one species of an antigen binding site capable of immunoreacting with a particular epitope.

Polyclonal antibodies can be prepared as described above by immunizing a
20 suitable subject with a polypeptide of the invention as an immunogen. Preferred polyclonal antibody compositions are ones that have been selected for antibodies directed against a polypeptide or polypeptides of the invention. Particularly preferred polyclonal antibody preparations are ones that contain only antibodies directed against a polypeptide or polypeptides of the invention. Particularly preferred immunogen
25 compositions are those that contain no other human proteins such as, for example, immunogen compositions made using a non-human host cell for recombinant expression of a polypeptide of the invention. In such a manner, the only human epitope or epitopes recognized by the resulting antibody compositions raised against this immunogen will be present as part of a polypeptide or polypeptides of the invention.

30 The antibody titer in the immunized subject can be monitored over time by standard techniques, such as with an enzyme linked immunosorbent assay (ELISA) using immobilized polypeptide. If desired, the antibody molecules can be harvested or

isolated from the subject (*e.g.*, from the blood or serum of the subject) and further purified by well-known techniques, such as protein A chromatography to obtain the IgG fraction. Alternatively, antibodies specific for a protein or polypeptide of the invention can be selected or (*e.g.*, partially purified) or purified by, *e.g.*, affinity chromatography.

- 5 For example, a recombinantly expressed and purified (or partially purified) protein of the invention is produced as described herein, and covalently or non-covalently coupled to a solid support such as, for example, a chromatography column. The column can then be used to affinity purify antibodies specific for the proteins of the invention from a sample containing antibodies directed against a large number of different epitopes,
- 10 thereby generating a substantially purified antibody composition, *i.e.*, one that is substantially free of contaminating antibodies. By a substantially purified antibody composition is meant, in this context, that the antibody sample contains at most only 30% (by dry weight) of contaminating antibodies directed against epitopes other than those of the desired protein or polypeptide of the invention, and preferably at most 20%,
- 15 yet more preferably at most 10%, and most preferably at most 5% (by dry weight) of the sample is contaminating antibodies. A purified antibody composition means that at least 99% of the antibodies in the composition are directed against the desired protein or polypeptide of the invention.

- At an appropriate time after immunization, *e.g.*, when the specific antibody titers
- 20 are highest, antibody-producing cells can be obtained from the subject and used to prepare monoclonal antibodies by standard techniques, such as the hybridoma technique originally described by Kohler and Milstein (1975) *Nature* 256:495-497, the human B cell hybridoma technique (see Kozbor *et al.*, 1983, *Immunol. Today* 4:72), the EBV-hybridoma technique (see Cole *et al.*, pp. 77-96 In *Monoclonal Antibodies and Cancer*
- 25 *Therapy*, Alan R. Liss, Inc., 1985) or trioma techniques. The technology for producing hybridomas is well known (see generally *Current Protocols in Immunology*, Coligan *et al.* ed., John Wiley & Sons, New York, 1994). Hybridoma cells producing a monoclonal antibody of the invention are detected by screening the hybridoma culture supernatants for antibodies that bind the polypeptide of interest, *e.g.*, using a standard
- 30 ELISA assay.

Alternative to preparing monoclonal antibody-secreting hybridomas, a monoclonal antibody directed against a polypeptide of the invention can be identified and isolated by screening a recombinant combinatorial immunoglobulin library (*e.g.*, an antibody phage display library) with the polypeptide of interest. Kits for generating and screening phage display libraries are commercially available (*e.g.*, the Pharmacia *Recombinant Phage Antibody System*, Catalog No. 27-9400-01; and the Stratagene *SurfZAP Phage Display Kit*, Catalog No. 240612). Additionally, examples of methods and reagents particularly amenable for use in generating and screening antibody display library can be found in, for example, U.S. Patent No. 5,223,409; PCT Publication No. WO 92/18619; PCT Publication No. WO 91/17271; PCT Publication No. WO 92/20791; PCT Publication No. WO 92/15679; PCT Publication No. WO 93/01288; PCT Publication No. WO 92/01047; PCT Publication No. WO 92/09690; PCT Publication No. WO 90/02809; Fuchs *et al.* (1991) *Bio/Technology* 9:1370-1372; Hay *et al.* (1992) *Hum. Antibod. Hybridomas* 3:81-85; Huse *et al.* (1989) *Science* 246:1275-1281; Griffiths *et al.* (1993) *EMBO J.* 12:725-734.

Additionally, recombinant antibodies, such as chimeric and humanized monoclonal antibodies, comprising both human and non-human portions, which can be made using standard recombinant DNA techniques, are within the scope of the invention. A chimeric antibody is a molecule in which different portions are derived from different animal species, such as those having a variable region derived from a murine mAb and a human immunoglobulin constant region. (See, *e.g.*, Cabilly *et al.*, U.S. Patent No. 4,816,567; and Boss *et al.*, U.S. Patent No. 4,816,397, which are incorporated herein by reference in their entirety.) Humanized antibodies are antibody molecules from non-human species having one or more complementarily determining regions (CDRs) from the non-human species and a framework region from a human immunoglobulin molecule. (See, *e.g.*, Queen, U.S. Patent No. 5,585,089, which is incorporated herein by reference in its entirety.) Such chimeric and humanized monoclonal antibodies can be produced by recombinant DNA techniques known in the art, for example using methods described in PCT Publication No. WO 87/02671; European Patent Application 184,187; European Patent Application 171,496; European Patent Application 173,494; PCT Publication No. WO 86/01533; U.S. Patent No. 4,816,567; European Patent Application 125,023; Better *et al.* (1988) *Science* 240:1041-

1043; Liu *et al.* (1987) *Proc. Natl. Acad. Sci. USA* 84:3439-3443; Liu *et al.* (1987) *J. Immunol.* 139:3521- 3526; Sun *et al.* (1987) *Proc. Natl. Acad. Sci. USA* 84:214-218; Nishimura *et al.* (1987) *Cancer Res.* 47:999-1005; Wood *et al.* (1985) *Nature* 314:446-449; and Shaw *et al.* (1988) *J. Natl. Cancer Inst.* 80:1553-1559; Morrison (1985)
5 *Science* 229:1202-1207; Oi *et al.* (1986) *Bio/Techniques* 4:214; U.S. Patent 5,225,539; Jones *et al.* (1986) *Nature* 321:552-525; Verhoeven *et al.* (1988) *Science* 239:1534; and Beidler *et al.* (1988) *J. Immunol.* 141:4053-4060.

Antibodies of the invention may be used as therapeutic agents in treating cancers. In a preferred embodiment, completely human antibodies of the invention are
10 used for therapeutic treatment of human cancer patients, particularly those having an ovarian cancer. Such antibodies can be produced, for example, using transgenic mice which are incapable of expressing endogenous immunoglobulin heavy and light chain genes, but which can express human heavy and light chain genes. The transgenic mice are immunized in the normal fashion with a selected antigen, *e.g.*, all or a portion of a
15 polypeptide corresponding to a marker of the invention. Monoclonal antibodies directed against the antigen can be obtained using conventional hybridoma technology. The human immunoglobulin transgenes harbored by the transgenic mice rearrange during B cell differentiation, and subsequently undergo class switching and somatic mutation. Thus, using such a technique, it is possible to produce therapeutically useful IgG, IgA
20 and IgE antibodies. For an overview of this technology for producing human antibodies, see Lonberg and Huszar (1995) *Int. Rev. Immunol.* 13:65-93). For a detailed discussion of this technology for producing human antibodies and human monoclonal antibodies and protocols for producing such antibodies, see, *e.g.*, U.S. Patent 5,625,126; U.S. Patent 5,633,425; U.S. Patent 5,569,825; U.S. Patent 5,661,016; and U.S. Patent
25 5,545,806. In addition, companies such as Abgenix, Inc. (Freemont, CA), can be engaged to provide human antibodies directed against a selected antigen using technology similar to that described above.

Completely human antibodies which recognize a selected epitope can be generated using a technique referred to as "guided selection." In this approach a
30 selected non-human monoclonal antibody, *e.g.*, a murine antibody, is used to guide the selection of a completely human antibody recognizing the same epitope (Jespers *et al.*, 1994, *Bio/technology* 12:899-903).

- An antibody directed against a polypeptide corresponding to a marker of the invention (*e.g.*, a monoclonal antibody) can be used to isolate the polypeptide by standard techniques, such as affinity chromatography or immunoprecipitation. Moreover, such an antibody can be used to detect the marker (*e.g.*, in a cellular lysate or
- 5 cell supernatant) in order to evaluate the level and pattern of expression of the marker. The antibodies can also be used diagnostically to monitor protein levels in tissues or body fluids (*e.g.* in an ovary-associated body fluid) as part of a clinical testing procedure, *e.g.*, to, for example, determine the efficacy of a given treatment regimen. Detection can be facilitated by coupling the antibody to a detectable substance.
- 10 Examples of detectable substances include various enzymes, prosthetic groups, fluorescent materials, luminescent materials, bioluminescent materials, and radioactive materials. Examples of suitable enzymes include horseradish peroxidase, alkaline phosphatase, β -galactosidase, or acetylcholinesterase; examples of suitable prosthetic group complexes include streptavidin/biotin and avidin/biotin; examples of suitable
- 15 fluorescent materials include umbelliferone, fluorescein, fluorescein isothiocyanate, rhodamine, dichlorotriazinylamine fluorescein, dansyl chloride or phycoerythrin; an example of a luminescent material includes luminol; examples of bioluminescent materials include luciferase, luciferin, and aequorin, and examples of suitable radioactive material include ^{125}I , ^{131}I , ^{35}S or ^3H .
- 20 Further, an antibody (or fragment thereof) can be conjugated to a therapeutic moiety such as a cytotoxin, a therapeutic agent or a radioactive metal ion. A cytotoxin or cytotoxic agent includes any agent that is detrimental to cells. Examples include taxol, cytochalasin B, gramicidin D, ethidium bromide, emetine, mitomycin, etoposide, tenoposide, vincristine, vinblastine, colchicin, doxorubicin, daunorubicin, dihydroxy
- 25 anthracin dione, mitoxantrone, mithramycin, actinomycin D, 1-dehydrotestosterone, glucocorticoids, procaine, tetracaine, lidocaine, propranolol, and puromycin and analogs or homologs thereof. Therapeutic agents include, but are not limited to, antimetabolites (*e.g.*, methotrexate, 6-mercaptopurine, 6-thioguanine, cytarabine, 5-fluorouracil decarbazine), alkylating agents (*e.g.*, mechlorethamine, thioepa chlorambucil,
- 30 melphalan, carmustine (BSNU) and lomustine (CCNU), cyclophosphamide, busulfan, dibromomannitol, streptozotocin, mitomycin C, and cis-dichlorodiamine platinum (II) (DDP) cisplatin), anthracyclines (*e.g.*, daunorubicin (formerly daunomycin) and

doxorubicin), antibiotics (*e.g.*, dactinomycin (formerly actinomycin), bleomycin, mithramycin, and anthramycin (AMC)), and anti-mitotic agents (*e.g.*, vincristine and vinblastine).

The conjugates of the invention can be used for modifying a given biological response, the drug moiety is not to be construed as limited to classical chemical therapeutic agents. For example, the drug moiety may be a protein or polypeptide possessing a desired biological activity. Such proteins may include, for example, a toxin such as abrin, ricin A, pseudomonas exotoxin, or diphtheria toxin; a protein such as tumor necrosis factor, .alpha.-interferon, .beta.-interferon, nerve growth factor, platelet derived growth factor, tissue plasminogen activator; or, biological response modifiers such as, for example, lymphokines, interleukin-1 ("IL-1"), interleukin-2 ("IL-2"), interleukin-6 ("IL-6"), granulocyte macrophage colony stimulating factor ("GM-CSF"), granulocyte colony stimulating factor ("G-CSF"), or other growth factors.

Techniques for conjugating such therapeutic moiety to antibodies are well known, see, *e.g.*, Arnon et al., "Monoclonal Antibodies For Immunotargeting Of Drugs In Cancer Therapy", in *Monoclonal Antibodies And Cancer Therapy*, Reisfeld et al. (eds.), pp. 243-56 (Alan R. Liss, Inc. 1985); Hellstrom et al., "Antibodies For Drug Delivery", in *Controlled Drug Delivery* (2nd Ed.), Robinson et al. (eds.), pp. 623-53 (Marcel Dekker, Inc. 1987); Thorpe, "Antibody Carriers Of Cytotoxic Agents In Cancer Therapy: A Review", in *Monoclonal Antibodies '84: Biological And Clinical Applications*, Pinchera et al. (eds.), pp. 475-506 (1985); "Analysis, Results, And Future Prospective Of The Therapeutic Use Of Radiolabeled Antibody In Cancer Therapy", in *Monoclonal Antibodies For Cancer Detection And Therapy*, Baldwin et al. (eds.), pp. 303-16 (Academic Press 1985), and Thorpe et al., "The Preparation And Cytotoxic Properties Of Antibody-Toxin Conjugates", *Immunol. Rev.*, 62:119-58 (1982).

Alternatively, an antibody can be conjugated to a second antibody to form an antibody heteroconjugate as described by Segal in U.S. Patent No. 4,676,980.

Accordingly, in one aspect, the invention provides substantially purified antibodies or fragments thereof, and non-human antibodies or fragments thereof, which antibodies or fragments specifically bind to a polypeptide comprising an amino acid sequence selected from the group consisting of the amino acid sequences of the present invention, an amino acid sequence encoded by the cDNA of the present invention, a

fragment of at least 15 amino acid residues of an amino acid sequence of the present invention, an amino acid sequence which is at least 95% identical to the amino acid sequence of the present invention (wherein the percent identity is determined using the ALIGN program of the GCG software package with a PAM120 weight residue table, a gap length penalty of 12, and a gap penalty of 4) and an amino acid sequence which is encoded by a nucleic acid molecule which hybridizes to a nucleic acid molecule consisting of the nucleic acid molecules of the present invention, or a complement thereof, under conditions of hybridization of 6X SSC at 45°C and washing in 0.2 X SSC, 0.1% SDS at 65°C. In various embodiments, the substantially purified antibodies of the invention, or fragments thereof, can be human, non-human, chimeric and/or humanized antibodies.

In another aspect, the invention provides non-human antibodies or fragments thereof, which antibodies or fragments specifically bind to a polypeptide comprising an amino acid sequence selected from the group consisting of: the amino acid sequence of the present invention, an amino acid sequence encoded by the cDNA of the present invention, a fragment of at least 15 amino acid residues of the amino acid sequence of the present invention, an amino acid sequence which is at least 95% identical to the amino acid sequence of the present invention (wherein the percent identity is determined using the ALIGN program of the GCG software package with a PAM120 weight residue table, a gap length penalty of 12, and a gap penalty of 4) and an amino acid sequence which is encoded by a nucleic acid molecule which hybridizes to a nucleic acid molecule consisting of the nucleic acid molecules of the present invention, or a complement thereof, under conditions of hybridization of 6X SSC at 45°C and washing in 0.2 X SSC, 0.1% SDS at 65°C. Such non-human antibodies can be goat, mouse, sheep, horse, chicken, rabbit, or rat antibodies. Alternatively, the non-human antibodies of the invention can be chimeric and/or humanized antibodies. In addition, the non-human antibodies of the invention can be polyclonal antibodies or monoclonal antibodies.

In still a further aspect, the invention provides monoclonal antibodies or fragments thereof, which antibodies or fragments specifically bind to a polypeptide comprising an amino acid sequence selected from the group consisting of the amino acid sequences of the present invention, an amino acid sequence encoded by the cDNA of the

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present invention, a fragment of at least 15 amino acid residues of an amino acid sequence of the present invention, an amino acid sequence which is at least 95% identical to an amino acid sequence of the present invention (wherein the percent identity is determined using the ALIGN program of the GCG software package with a PAM120 weight residue table, a gap length penalty of 12, and a gap penalty of 4) and an amino acid sequence which is encoded by a nucleic acid molecule which hybridizes to a nucleic acid molecule consisting of the nucleic acid molecules of the present invention, or a complement thereof, under conditions of hybridization of 6X SSC at 45°C and washing in 0.2 X SSC, 0.1% SDS at 65°C. The monoclonal antibodies can be human, humanized, chimeric and/or non-human antibodies.

The substantially purified antibodies or fragments thereof may specifically bind to a signal peptide, a secreted sequence, an extracellular domain, a transmembrane or a cytoplasmic domain or cytoplasmic membrane of a polypeptide of the invention. In a particularly preferred embodiment, the substantially purified antibodies or fragments thereof, the non-human antibodies or fragments thereof, and/or the monoclonal antibodies or fragments thereof, of the invention specifically bind to a secreted sequence or an extracellular domain of the amino acid sequences of the present invention.

Any of the antibodies of the invention can be conjugated to a therapeutic moiety or to a detectable substance. Non-limiting examples of detectable substances that can be conjugated to the antibodies of the invention are an enzyme, a prosthetic group, a fluorescent material, a luminescent material, a bioluminescent material, and a radioactive material.

The invention also provides a kit containing an antibody of the invention conjugated to a detectable substance, and instructions for use. Still another aspect of the invention is a pharmaceutical composition comprising an antibody of the invention and a pharmaceutically acceptable carrier. In preferred embodiments, the pharmaceutical composition contains an antibody of the invention, a therapeutic moiety, and a pharmaceutically acceptable carrier.

Still another aspect of the invention is a method of making an antibody that specifically recognizes a polypeptide of the present invention, the method comprising immunizing a mammal with a polypeptide. The polypeptide used as an immunogen comprises an amino acid sequence selected from the group consisting of the amino acid

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sequence of the present invention, an amino acid sequence encoded by the cDNA of the nucleic acid molecules of the present invention, a fragment of at least 15 amino acid residues of the amino acid sequence of the present invention, an amino acid sequence which is at least 95% identical to the amino acid sequence of the present invention
5 (wherein the percent identity is determined using the ALIGN program of the GCG software package with a PAM120 weight residue table, a gap length penalty of 12, and a gap penalty of 4) and an amino acid sequence which is encoded by a nucleic acid molecule which hybridizes to a nucleic acid molecule consisting of the nucleic acid molecules of the present invention, or a complement thereof, under conditions of
10 hybridization of 6X SSC at 45°C and washing in 0.2 X SSC, 0.1% SDS at 65°C.

After immunization, a sample is collected from the mammal that contains an antibody that specifically recognizes the polypeptide. Preferably, the polypeptide is recombinantly produced using a non-human host cell. Optionally, the antibodies can be further purified from the sample using techniques well known to those of skill in the art.
15 The method can further comprise producing a monoclonal antibody- producing cell from the cells of the mammal. Optionally, antibodies are collected from the antibody-producing cell.

III. Recombinant Expression Vectors and Host Cells

20 Another aspect of the invention pertains to vectors, preferably expression vectors, containing a nucleic acid encoding a polypeptide corresponding to a marker of the invention (or a portion of such a polypeptide). As used herein, the term "vector" refers to a nucleic acid molecule capable of transporting another nucleic acid to which it has been linked. One type of vector is a "plasmid", which refers to a circular double
25 stranded DNA loop into which additional DNA segments can be ligated. Another type of vector is a viral vector, wherein additional DNA segments can be ligated into the viral genome. Certain vectors are capable of autonomous replication in a host cell into which they are introduced (*e.g.*, bacterial vectors having a bacterial origin of replication and episomal mammalian vectors). Other vectors (*e.g.*, non-episomal mammalian vectors)
30 are integrated into the genome of a host cell upon introduction into the host cell, and thereby are replicated along with the host genome. Moreover, certain vectors, namely expression vectors, are capable of directing the expression of genes to which they are

operably linked. In general, expression vectors of utility in recombinant DNA techniques are often in the form of plasmids (vectors). However, the invention is intended to include such other forms of expression vectors, such as viral vectors (*e.g.*, replication defective retroviruses, adenoviruses and adeno-associated viruses), which

5 serve equivalent functions.

The recombinant expression vectors of the invention comprise a nucleic acid of the invention in a form suitable for expression of the nucleic acid in a host cell. This means that the recombinant expression vectors include one or more regulatory sequences, selected on the basis of the host cells to be used for expression, which is

10 operably linked to the nucleic acid sequence to be expressed. Within a recombinant expression vector, "operably linked" is intended to mean that the nucleotide sequence of interest is linked to the regulatory sequence(s) in a manner which allows for expression of the nucleotide sequence (*e.g.*, in an *in vitro* transcription/translation system or in a host cell when the vector is introduced into the host cell). The term "regulatory

15 sequence" is intended to include promoters, enhancers and other expression control elements (*e.g.*, polyadenylation signals). Such regulatory sequences are described, for example, in Goeddel, *Methods in Enzymology: Gene Expression Technology* vol.185, Academic Press, San Diego, CA (1991). Regulatory sequences include those which direct constitutive expression of a nucleotide sequence in many types of host cell and

20 those which direct expression of the nucleotide sequence only in certain host cells (*e.g.*, tissue-specific regulatory sequences). It will be appreciated by those skilled in the art that the design of the expression vector can depend on such factors as the choice of the host cell to be transformed, the level of expression of protein desired, and the like. The expression vectors of the invention can be introduced into host cells to thereby produce

25 proteins or peptides, including fusion proteins or peptides, encoded by nucleic acids as described herein.

The recombinant expression vectors of the invention can be designed for expression of a polypeptide corresponding to a marker of the invention in prokaryotic (*e.g.*, *E. coli*) or eukaryotic cells (*e.g.*, insect cells {using baculovirus expression

30 vectors}, yeast cells or mammalian cells). Suitable host cells are discussed further in Goeddel, *supra*. Alternatively, the recombinant expression vector can be transcribed

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and translated *in vitro*, for example using T7 promoter regulatory sequences and T7 polymerase.

Expression of proteins in prokaryotes is most often carried out in *E. coli* with vectors containing constitutive or inducible promoters directing the expression of either fusion or non-fusion proteins. Fusion vectors add a number of amino acids to a protein encoded therein, usually to the amino terminus of the recombinant protein. Such fusion vectors typically serve three purposes: 1) to increase expression of recombinant protein; 2) to increase the solubility of the recombinant protein; and 3) to aid in the purification of the recombinant protein by acting as a ligand in affinity purification. Often, in fusion expression vectors, a proteolytic cleavage site is introduced at the junction of the fusion moiety and the recombinant protein to enable separation of the recombinant protein from the fusion moiety subsequent to purification of the fusion protein. Such enzymes, and their cognate recognition sequences, include Factor Xa, thrombin and enterokinase. Typical fusion expression vectors include pGEX (Pharmacia Biotech Inc; Smith and Johnson, 1988, *Gene* 67:31-40), pMAL (New England Biolabs, Beverly, MA) and pRIT5 (Pharmacia, Piscataway, NJ) which fuse glutathione S-transferase (GST), maltose E binding protein, or protein A, respectively, to the target recombinant protein.

Examples of suitable inducible non-fusion *E. coli* expression vectors include pTrc (Amann *et al.*, 1988, *Gene* 69:301-315) and pET 11d (Studier *et al.*, p. 60-89, In *Gene Expression Technology: Methods in Enzymology* vol.185, Academic Press, San Diego, CA, 1991). Target gene expression from the pTrc vector relies on host RNA polymerase transcription from a hybrid *trp-lac* fusion promoter. Target gene expression from the pET 11d vector relies on transcription from a T7 *gn10-lac* fusion promoter mediated by a co-expressed viral RNA polymerase (T7 *gn1*). This viral polymerase is supplied by host strains BL21(DE3) or HMS174(DE3) from a resident prophage harboring a T7 *gn1* gene under the transcriptional control of the *lacUV 5* promoter.

One strategy to maximize recombinant protein expression in *E. coli* is to express the protein in a host bacteria with an impaired capacity to proteolytically cleave the recombinant protein (Gottesman, p. 119-128, In *Gene Expression Technology: Methods in Enzymology* vol. 185, Academic Press, San Diego, CA, 1990). Another strategy is to alter the nucleic acid sequence of the nucleic acid to be inserted into an expression vector so that the individual codons for each amino acid are those preferentially utilized

in *E. coli* (Wada *et al.*, 1992, *Nucleic Acids Res.* 20:2111-2118). Such alteration of nucleic acid sequences of the invention can be carried out by standard DNA synthesis techniques.

In another embodiment, the expression vector is a yeast expression vector.

- 5 Examples of vectors for expression in yeast *S. cerevisiae* include pYepSec1 (Baldari *et al.*, 1987, *EMBO J.* 6:229-234), pMFa (Kurjan and Herskowitz, 1982, *Cell* 30:933-943), pJRY88 (Schultz *et al.*, 1987, *Gene* 54:113-123), pYES2 (Invitrogen Corporation, San Diego, CA), and pPicZ (Invitrogen Corp, San Diego, CA).

Alternatively, the expression vector is a baculovirus expression vector.

- 10 Baculovirus vectors available for expression of proteins in cultured insect cells (*e.g.*, Sf 9 cells) include the pAc series (Smith *et al.*, 1983, *Mol. Cell Biol.* 3:2156-2165) and the pVL series (Lucklow and Summers, 1989, *Virology* 170:31-39).

In yet another embodiment, a nucleic acid of the invention is expressed in mammalian cells using a mammalian expression vector. Examples of mammalian

- 15 expression vectors include pCDM8 (Seed, 1987, *Nature* 329:840) and pMT2PC (Kaufman *et al.*, 1987, *EMBO J.* 6:187-195). When used in mammalian cells, the expression vector's control functions are often provided by viral regulatory elements. For example, commonly used promoters are derived from polyoma, Adenovirus 2, cytomegalovirus and Simian Virus 40. For other suitable expression systems for both
- 20 prokaryotic and eukaryotic cells see chapters 16 and 17 of Sambrook *et al.*, *supra*.

In another embodiment, the recombinant mammalian expression vector is capable of directing expression of the nucleic acid preferentially in a particular cell type (*e.g.*, tissue-specific regulatory elements are used to express the nucleic acid). Tissue-specific regulatory elements are known in the art. Non-limiting examples of suitable

- 25 tissue-specific promoters include the albumin promoter (liver-specific; Pinkert *et al.*, 1987, *Genes Dev.* 1:268-277), lymphoid-specific promoters (Calame and Eaton, 1988, *Adv. Immunol.* 43:235-275), in particular promoters of T cell receptors (Winoto and Baltimore, 1989, *EMBO J.* 8:729-733) and immunoglobulins (Banerji *et al.*, 1983, *Cell* 33:729-740; Queen and Baltimore, 1983, *Cell* 33:741-748), neuron-specific promoters
- 30 (*e.g.*, the neurofilament promoter; Byrne and Ruddle, 1989, *Proc. Natl. Acad. Sci. USA* 86:5473-5477), pancreas-specific promoters (Edlund *et al.*, 1985, *Science* 230:912-916), and mammary gland-specific promoters (*e.g.*, milk whey promoter; U.S. Patent No.

4,873,316 and European Application Publication No. 264,166). Developmentally-regulated promoters are also encompassed, for example the murine hox promoters (Kessel and Gruss, 1990, *Science* 249:374-379) and the α -fetoprotein promoter (Camper and Tilghman, 1989, *Genes Dev.* 3:537-546).

- 5 The invention further provides a recombinant expression vector comprising a DNA molecule of the invention cloned into the expression vector in an antisense orientation. That is, the DNA molecule is operably linked to a regulatory sequence in a manner which allows for expression (by transcription of the DNA molecule) of an RNA molecule which is antisense to the mRNA encoding a polypeptide of the invention.
- 10 Regulatory sequences operably linked to a nucleic acid cloned in the antisense orientation can be chosen which direct the continuous expression of the antisense RNA molecule in a variety of cell types, for instance viral promoters and/or enhancers, or regulatory sequences can be chosen which direct constitutive, tissue-specific or cell type specific expression of antisense RNA. The antisense expression vector can be in the
- 15 form of a recombinant plasmid, phagemid, or attenuated virus in which antisense nucleic acids are produced under the control of a high efficiency regulatory region, the activity of which can be determined by the cell type into which the vector is introduced. For a discussion of the regulation of gene expression using antisense genes see Weintraub *et al.*, 1986, *Trends in Genetics*, Vol. 1(1).
- 20 Another aspect of the invention pertains to host cells into which a recombinant expression vector of the invention has been introduced. The terms "host cell" and "recombinant host cell" are used interchangeably herein. It is understood that such terms refer not only to the particular subject cell but to the progeny or potential progeny of such a cell. Because certain modifications may occur in succeeding generations due
- 25 to either mutation or environmental influences, such progeny may not, in fact, be identical to the parent cell, but are still included within the scope of the term as used herein.

A host cell can be any prokaryotic (*e.g.*, *E. coli*) or eukaryotic cell (*e.g.*, insect cells, yeast or mammalian cells).

- 30 Vector DNA can be introduced into prokaryotic or eukaryotic cells via conventional transformation or transfection techniques. As used herein, the terms "transformation" and "transfection" are intended to refer to a variety of art-recognized

techniques for introducing foreign nucleic acid into a host cell, including calcium phosphate or calcium chloride co-precipitation, DEAE-dextran-mediated transfection, lipofection, or electroporation. Suitable methods for transforming or transfecting host cells can be found in Sambrook, *et al.* (*supra*), and other laboratory manuals.

- 5 For stable transfection of mammalian cells, it is known that, depending upon the expression vector and transfection technique used, only a small fraction of cells may integrate the foreign DNA into their genome. In order to identify and select these integrants, a gene that encodes a selectable marker (*e.g.*, for resistance to antibiotics) is generally introduced into the host cells along with the gene of interest. Preferred
- 10 selectable markers include those which confer resistance to drugs, such as G418, hygromycin and methotrexate. Cells stably transfected with the introduced nucleic acid can be identified by drug selection (*e.g.*, cells that have incorporated the selectable marker gene will survive, while the other cells die).

- A host cell of the invention, such as a prokaryotic or eukaryotic host cell in
- 15 culture, can be used to produce a polypeptide corresponding to a marker of the invention. Accordingly, the invention further provides methods for producing a polypeptide corresponding to a marker of the invention using the host cells of the invention. In one embodiment, the method comprises culturing the host cell of invention (into which a recombinant expression vector encoding a polypeptide of the
- 20 invention has been introduced) in a suitable medium such that the marker is produced. In another embodiment, the method further comprises isolating the marker polypeptide from the medium or the host cell.

- The host cells of the invention can also be used to produce nonhuman transgenic animals. For example, in one embodiment, a host cell of the invention is a fertilized
- 25 oocyte or an embryonic stem cell into which a sequences encoding a polypeptide corresponding to a marker of the invention have been introduced. Such host cells can then be used to create non-human transgenic animals in which exogenous sequences encoding a marker protein of the invention have been introduced into their genome or homologous recombinant animals in which endogenous gene(s) encoding a polypeptide
- 30 corresponding to a marker of the invention sequences have been altered. Such animals are useful for studying the function and/or activity of the polypeptide corresponding to the marker and for identifying and/or evaluating modulators of polypeptide activity. As

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used herein, a "transgenic animal" is a non-human animal, preferably a mammal, more preferably a rodent such as a rat or mouse, in which one or more of the cells of the animal includes a transgene. Other examples of transgenic animals include non-human primates, sheep, dogs, cows, goats, chickens, amphibians, etc. A transgene is exogenous DNA which is integrated into the genome of a cell from which a transgenic animal develops and which remains in the genome of the mature animal, thereby directing the expression of an encoded gene product in one or more cell types or tissues of the transgenic animal. As used herein, an "homologous recombinant animal" is a non-human animal, preferably a mammal, more preferably a mouse, in which an endogenous gene has been altered by homologous recombination between the endogenous gene and an exogenous DNA molecule introduced into a cell of the animal, *e.g.*, an embryonic cell of the animal, prior to development of the animal.

A transgenic animal of the invention can be created by introducing a nucleic acid encoding a polypeptide corresponding to a marker of the invention into the male pronuclei of a fertilized oocyte, *e.g.*, by microinjection, retroviral infection, and allowing the oocyte to develop in a pseudopregnant female foster animal. Intronic sequences and polyadenylation signals can also be included in the transgene to increase the efficiency of expression of the transgene. A tissue-specific regulatory sequence(s) can be operably linked to the transgene to direct expression of the polypeptide of the invention to particular cells. Methods for generating transgenic animals via embryo manipulation and microinjection, particularly animals such as mice, have become conventional in the art and are described, for example, in U.S. Patent Nos. 4,736,866 and 4,870,009, U.S. Patent No. 4,873,191 and in Hogan, *Manipulating the Mouse Embryo*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, N.Y., 1986. Similar methods are used for production of other transgenic animals. A transgenic founder animal can be identified based upon the presence of the transgene in its genome and/or expression of mRNA encoding the transgene in tissues or cells of the animals. A transgenic founder animal can then be used to breed additional animals carrying the transgene. Moreover, transgenic animals carrying the transgene can further be bred to other transgenic animals carrying other transgenes.

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To create an homologous recombinant animal, a vector is prepared which contains at least a portion of a gene encoding a polypeptide corresponding to a marker of the invention into which a deletion, addition or substitution has been introduced to thereby alter, *e.g.*, functionally disrupt, the gene. In a preferred embodiment, the vector

5 is designed such that, upon homologous recombination, the endogenous gene is functionally disrupted (*i.e.*, no longer encodes a functional protein; also referred to as a "knock out" vector). Alternatively, the vector can be designed such that, upon homologous recombination, the endogenous gene is mutated or otherwise altered but still encodes functional protein (*e.g.*, the upstream regulatory region can be altered to

10 thereby alter the expression of the endogenous protein). In the homologous recombination vector, the altered portion of the gene is flanked at its 5' and 3' ends by additional nucleic acid of the gene to allow for homologous recombination to occur between the exogenous gene carried by the vector and an endogenous gene in an embryonic stem cell. The additional flanking nucleic acid sequences are of sufficient

15 length for successful homologous recombination with the endogenous gene. Typically, several kilobases of flanking DNA (both at the 5' and 3' ends) are included in the vector (see, *e.g.*, Thomas and Capecchi, 1987, *Cell* 51:503 for a description of homologous recombination vectors). The vector is introduced into an embryonic stem cell line (*e.g.*, by electroporation) and cells in which the introduced gene has homologously

20 recombined with the endogenous gene are selected (see, *e.g.*, Li *et al.*, 1992, *Cell* 69:915). The selected cells are then injected into a blastocyst of an animal (*e.g.*, a mouse) to form aggregation chimeras (see, *e.g.*, Bradley, *Teratocarcinomas and Embryonic Stem Cells: A Practical Approach*, Robertson, Ed., IRL, Oxford, 1987, pp. 113-152). A chimeric embryo can then be implanted into a suitable pseudopregnant

25 female foster animal and the embryo brought to term. Progeny harboring the homologously recombined DNA in their germ cells can be used to breed animals in which all cells of the animal contain the homologously recombined DNA by germline transmission of the transgene. Methods for constructing homologous recombination vectors and homologous recombinant animals are described further in Bradley (1991)

30 *Current Opinion in Bio/Technology* 2:823-829 and in PCT Publication NOS. WO 90/11354, WO 91/01140, WO 92/0968, and WO 93/04169.

In another embodiment, transgenic non-human animals can be produced which contain selected systems which allow for regulated expression of the transgene. One example of such a system is the *cre/loxP* recombinase system of bacteriophage P1. For a description of the *cre/loxP* recombinase system, see, e.g., Lakso *et al.* (1992) *Proc. Natl. Acad. Sci. USA* 89:6232-6236. Another example of a recombinase system is the FLP recombinase system of *Saccharomyces cerevisiae* (O'Gorman *et al.*, 1991, *Science* 251:1351-1355). If a *cre/loxP* recombinase system is used to regulate expression of the transgene, animals containing transgenes encoding both the *Cre* recombinase and a selected protein are required. Such animals can be provided through the construction of "double" transgenic animals, e.g., by mating two transgenic animals, one containing a transgene encoding a selected protein and the other containing a transgene encoding a recombinase.

Clones of the non-human transgenic animals described herein can also be produced according to the methods described in Wilmut *et al.* (1997) *Nature* 385:810-813 and PCT Publication NOS. WO 97/07668 and WO 97/07669.

IV. Pharmaceutical Compositions

The nucleic acid molecules, polypeptides, and antibodies (also referred to herein as "active compounds") corresponding to a marker of the invention can be incorporated into pharmaceutical compositions suitable for administration. Such compositions typically comprise the nucleic acid molecule, protein, or antibody and a pharmaceutically acceptable carrier. As used herein the language "pharmaceutically acceptable carrier" is intended to include any and all solvents, dispersion media, coatings, antibacterial and antifungal agents, isotonic and absorption delaying agents, and the like, compatible with pharmaceutical administration. The use of such media and agents for pharmaceutically active substances is well known in the art. Except insofar as any conventional media or agent is incompatible with the active compound, use thereof in the compositions is contemplated. Supplementary active compounds can also be incorporated into the compositions.

The invention includes methods for preparing pharmaceutical compositions for modulating the expression or activity of a polypeptide or nucleic acid corresponding to a marker of the invention. Such methods comprise formulating a pharmaceutically

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acceptable carrier with an agent which modulates expression or activity of a polypeptide or nucleic acid corresponding to a marker of the invention. Such compositions can further include additional active agents. Thus, the invention further includes methods for preparing a pharmaceutical composition by formulating a pharmaceutically acceptable carrier with an agent which modulates expression or activity of a polypeptide or nucleic acid corresponding to a marker of the invention and one or more additional active compounds.

The invention also provides methods (also referred to herein as "screening assays") for identifying modulators, *i.e.*, candidate or test compounds or agents (*e.g.*, peptides, peptidomimetics, peptoids, small molecules or other drugs) which (a) bind to the marker, or (b) have a modulatory (*e.g.*, stimulatory or inhibitory) effect on the activity of the marker or, more specifically, (c) have a modulatory effect on the interactions of the marker with one or more of its natural substrates (*e.g.*, peptide, protein, hormone, co-factor, or nucleic acid), or (d) have a modulatory effect on the expression of the marker. Such assays typically comprise a reaction between the marker and one or more assay components. The other components may be either the test compound itself, or a combination of test compound and a natural binding partner of the marker.

The test compounds of the present invention may be obtained from any available source, including systematic libraries of natural and/or synthetic compounds. Test compounds may also be obtained by any of the numerous approaches in combinatorial library methods known in the art, including: biological libraries; peptoid libraries (libraries of molecules having the functionalities of peptides, but with a novel, non-peptide backbone which are resistant to enzymatic degradation but which nevertheless remain bioactive; see, *e.g.*, Zuckermann *et al.*, 1994, *J. Med. Chem.* 37:2678-85); spatially addressable parallel solid phase or solution phase libraries; synthetic library methods requiring deconvolution; the 'one-bead one-compound' library method; and synthetic library methods using affinity chromatography selection. The biological library and peptoid library approaches are limited to peptide libraries, while the other four approaches are applicable to peptide, non-peptide oligomer or small molecule libraries of compounds (Lam, 1997, *Anticancer Drug Des.* 12:145).

Examples of methods for the synthesis of molecular libraries can be found in the art, for example in: DeWitt *et al.* (1993) *Proc. Natl. Acad. Sci. U.S.A.* 90:6909; Erb *et al.* (1994) *Proc. Natl. Acad. Sci. USA* 91:11422; Zuckermann *et al.* (1994). *J. Med. Chem.* 37:2678; Cho *et al.* (1993) *Science* 261:1303; Carrell *et al.* (1994) *Angew. Chem. Int. Ed. Engl.* 33:2059; Carrell *et al.* (1994) *Angew. Chem. Int. Ed. Engl.* 33:2061; and in Gallop *et al.* (1994) *J. Med. Chem.* 37:1233.

Libraries of compounds may be presented in solution (*e.g.*, Houghten, 1992, *Biotechniques* 13:412-421), or on beads (Lam, 1991, *Nature* 354:82-84), chips (Fodor, 1993, *Nature* 364:555-556), bacteria and/or spores, (Ladner, USP 5,223,409), plasmids (Cull *et al.*, 1992, *Proc Natl Acad Sci USA* 89:1865-1869) or on phage (Scott and Smith, 1990, *Science* 249:386-390; Devlin, 1990, *Science* 249:404-406; Cwirla *et al.*, 1990, *Proc. Natl. Acad. Sci.* 87:6378-6382; Felici, 1991, *J. Mol. Biol.* 222:301-310; Ladner, *supra.*).

In one embodiment, the invention provides assays for screening candidate or test compounds which are substrates of a marker or biologically active portion thereof. In another embodiment, the invention provides assays for screening candidate or test compounds which bind to a marker or biologically active portion thereof. Determining the ability of the test compound to directly bind to a marker can be accomplished, for example, by coupling the compound with a radioisotope or enzymatic label such that binding of the compound to the marker can be determined by detecting the labeled marker compound in a complex. For example, compounds (*e.g.*, marker substrates) can be labeled with ^{125}I , ^{35}S , ^{14}C , or ^3H , either directly or indirectly, and the radioisotope detected by direct counting of radioemission or by scintillation counting. Alternatively, assay components can be enzymatically labeled with, for example, horseradish peroxidase, alkaline phosphatase, or luciferase, and the enzymatic label detected by determination of conversion of an appropriate substrate to product.

In another embodiment, the invention provides assays for screening candidate or test compounds which modulate the activity of a marker or a biologically active portion thereof. In all likelihood, the marker can, *in vivo*, interact with one or more molecules, such as but not limited to, peptides, proteins, hormones, cofactors and nucleic acids. For the purposes of this discussion, such cellular and extracellular molecules are referred to herein as "binding partners" or marker "substrate".

One necessary embodiment of the invention in order to facilitate such screening is the use of the marker to identify its natural *in vivo* binding partners. There are many ways to accomplish this which are known to one skilled in the art. One example is the use of the marker protein as "bait protein" in a two-hybrid assay or three-hybrid assay (see, e.g., U.S. Patent No. 5,283,317; Zervos *et al*, 1993, *Cell* 72:223-232; Madura *et al*, 1993, *J. Biol. Chem.* 268:12046-12054; Bartel *et al*, 1993, *Biotechniques* 14:920-924; Iwabuchi *et al*, 1993 *Oncogene* 8:1693-1696; Brent WO94/10300) in order to identify other proteins which bind to or interact with the marker (binding partners) and, therefore, are possibly involved in the natural function of the marker. Such marker binding partners are also likely to be involved in the propagation of signals by the marker or downstream elements of a marker-mediated signaling pathway. Alternatively, such marker binding partners may also be found to be inhibitors of the marker.

The two-hybrid system is based on the modular nature of most transcription factors, which consist of separable DNA-binding and activation domains. Briefly, the assay utilizes two different DNA constructs. In one construct, the gene that encodes a marker protein fused to a gene encoding the DNA binding domain of a known transcription factor (e.g., GAL-4). In the other construct, a DNA sequence, from a library of DNA sequences, that encodes an unidentified protein ("prey" or "sample") is fused to a gene that codes for the activation domain of the known transcription factor. If the "bait" and the "prey" proteins are able to interact, *in vivo*, forming a marker-dependent complex, the DNA-binding and activation domains of the transcription factor are brought into close proximity. This proximity allows transcription of a reporter gene (e.g., LacZ) which is operably linked to a transcriptional regulatory site responsive to the transcription factor. Expression of the reporter gene can be readily detected and cell colonies containing the functional transcription factor can be isolated and used to obtain the cloned gene which encodes the protein which interacts with the marker protein.

In a further embodiment, assays may be devised through the use of the invention for the purpose of identifying compounds which modulate (e.g., affect either positively or negatively) interactions between a marker and its substrates and/or binding partners. Such compounds can include, but are not limited to, molecules such as antibodies, peptides, hormones, oligonucleotides, nucleic acids, and analogs thereof. Such compounds may also be obtained from any available source, including systematic

libraries of natural and/or synthetic compounds. The preferred assay components for use in this embodiment is an ovarian cancer marker identified herein, the known binding partner and/or substrate of same, and the test compound. Test compounds can be supplied from any source.

- 5 The basic principle of the assay systems used to identify compounds that interfere with the interaction between the marker and its binding partner involves preparing a reaction mixture containing the marker and its binding partner under conditions and for a time sufficient to allow the two products to interact and bind, thus forming a complex. In order to test an agent for inhibitory activity, the reaction mixture
- 10 is prepared in the presence and absence of the test compound. The test compound can be initially included in the reaction mixture, or can be added at a time subsequent to the addition of the marker and its binding partner. Control reaction mixtures are incubated without the test compound or with a placebo. The formation of any complexes between the marker and its binding partner is then detected. The formation of a complex in the
- 15 control reaction, but less or no such formation in the reaction mixture containing the test compound, indicates that the compound interferes with the interaction of the marker and its binding partner. Conversely, the formation of more complex in the presence of compound than in the control reaction indicates that the compound may enhance interaction of the marker and its binding partner.
- 20 The assay for compounds that interfere with the interaction of the marker with its binding partner may be conducted in a heterogeneous or homogeneous format. Heterogeneous assays involve anchoring either the marker or its binding partner onto a solid phase and detecting complexes anchored to the solid phase at the end of the reaction. In homogeneous assays, the entire reaction is carried out in a liquid phase. In
- 25 either approach, the order of addition of reactants can be varied to obtain different information about the compounds being tested. For example, test compounds that interfere with the interaction between the markers and the binding partners (*e.g.*, by competition) can be identified by conducting the reaction in the presence of the test substance, *i.e.*, by adding the test substance to the reaction mixture prior to or
- 30 simultaneously with the marker and its interactive binding partner. Alternatively, test compounds that disrupt preformed complexes, *e.g.*, compounds with higher binding constants that displace one of the components from the complex, can be tested by adding

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the test compound to the reaction mixture after complexes have been formed. The various formats are briefly described below.

In a heterogeneous assay system, either the marker or its binding partner is anchored onto a solid surface or matrix, while the other corresponding non-anchored component may be labeled, either directly or indirectly. In practice, microtitre plates are often utilized for this approach. The anchored species can be immobilized by a number of methods, either non-covalent or covalent, that are typically well known to one who practices the art. Non-covalent attachment can often be accomplished simply by coating the solid surface with a solution of the marker or its binding partner and drying.

10 Alternatively, an immobilized antibody specific for the assay component to be anchored can be used for this purpose. Such surfaces can often be prepared in advance and stored.

In related embodiments, a fusion protein can be provided which adds a domain that allows one or both of the assay components to be anchored to a matrix. For example, glutathione-S-transferase/marker fusion proteins or glutathione-S-transferase/binding partner can be adsorbed onto glutathione sepharose beads (Sigma Chemical, St. Louis, MO) or glutathione derivatized microtiter plates, which are then combined with the test compound or the test compound and either the non-adsorbed marker or its binding partner, and the mixture incubated under conditions conducive to complex formation (*e.g.*, physiological conditions). Following incubation, the beads or

15 microtiter plate wells are washed to remove any unbound assay components, the immobilized complex assessed either directly or indirectly, for example, as described above. Alternatively, the complexes can be dissociated from the matrix, and the level of marker binding or activity determined using standard techniques.

Other techniques for immobilizing proteins on matrices can also be used in the screening assays of the invention. For example, either a marker or a marker binding partner can be immobilized utilizing conjugation of biotin and streptavidin. Biotinylated marker protein or target molecules can be prepared from biotin-NHS (N-hydroxy-succinimide) using techniques known in the art (*e.g.*, biotinylation kit, Pierce Chemicals, Rockford, IL), and immobilized in the wells of streptavidin-coated 96 well plates (Pierce

25 Chemical). In certain embodiments, the protein-immobilized surfaces can be prepared in advance and stored.

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In order to conduct the assay, the corresponding partner of the immobilized assay component is exposed to the coated surface with or without the test compound. After the reaction is complete, unreacted assay components are removed (*e.g.*, by washing) and any complexes formed will remain immobilized on the solid surface. The detection of complexes anchored on the solid surface can be accomplished in a number of ways. Where the non-immobilized component is pre-labeled, the detection of label immobilized on the surface indicates that complexes were formed. Where the non-immobilized component is not pre-labeled, an indirect label can be used to detect complexes anchored on the surface; *e.g.*, using a labeled antibody specific for the initially non-immobilized species (the antibody, in turn, can be directly labeled or indirectly labeled with, *e.g.*, a labeled anti-Ig antibody). Depending upon the order of addition of reaction components, test compounds which modulate (inhibit or enhance) complex formation or which disrupt preformed complexes can be detected.

In an alternate embodiment of the invention, a homogeneous assay may be used. This is typically a reaction, analogous to those mentioned above, which is conducted in a liquid phase in the presence or absence of the test compound. The formed complexes are then separated from unreacted components, and the amount of complex formed is determined. As mentioned for heterogeneous assay systems, the order of addition of reactants to the liquid phase can yield information about which test compounds modulate (inhibit or enhance) complex formation and which disrupt preformed complexes.

In such a homogeneous assay, the reaction products may be separated from unreacted assay components by any of a number of standard techniques, including but not limited to: differential centrifugation, chromatography, electrophoresis and immunoprecipitation. In differential centrifugation, complexes of molecules may be separated from uncomplexed molecules through a series of centrifugal steps, due to the different sedimentation equilibria of complexes based on their different sizes and densities (see, for example, Rivas, G., and Minton, A.P., *Trends Biochem Sci* 1993 Aug;18(8):284-7). Standard chromatographic techniques may also be utilized to separate complexed molecules from uncomplexed ones. For example, gel filtration chromatography separates molecules based on size, and through the utilization of an appropriate gel filtration resin in a column format, for example, the relatively larger

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complex may be separated from the relatively smaller uncomplexed components. Similarly, the relatively different charge properties of the complex as compared to the uncomplexed molecules may be exploited to differentially separate the complex from the remaining individual reactants, for example through the use of ion-exchange chromatography resins. Such resins and chromatographic techniques are well known to one skilled in the art (see, *e.g.*, Heegaard, 1998, *J Mol. Recognit.* 11:141-148; Hage and Tweed, 1997, *J. Chromatogr. B. Biomed. Sci. Appl.*, 699:499-525). Gel electrophoresis may also be employed to separate complexed molecules from unbound species (see, *e.g.*, Ausubel *et al* (eds.), In: *Current Protocols in Molecular Biology*, J. Wiley & Sons, New York. 1999). In this technique, protein or nucleic acid complexes are separated based on size or charge, for example. In order to maintain the binding interaction during the electrophoretic process, nondenaturing gels in the absence of reducing agent are typically preferred, but conditions appropriate to the particular interactants will be well known to one skilled in the art. Immunoprecipitation is another common technique utilized for the isolation of a protein-protein complex from solution (see, *e.g.*, Ausubel *et al* (eds.), In: *Current Protocols in Molecular Biology*, J. Wiley & Sons, New York. 1999). In this technique, all proteins binding to an antibody specific to one of the binding molecules are precipitated from solution by conjugating the antibody to a polymer bead that may be readily collected by centrifugation. The bound assay components are released from the beads (through a specific proteolysis event or other technique well known in the art which will not disturb the protein-protein interaction in the complex), and a second immunoprecipitation step is performed, this time utilizing antibodies specific for the correspondingly different interacting assay component. In this manner, only formed complexes should remain attached to the beads. Variations in complex formation in both the presence and the absence of a test compound can be compared, thus offering information about the ability of the compound to modulate interactions between the marker and its binding partner.

Also within the scope of the present invention are methods for direct detection of interactions between the marker and its natural binding partner and/or a test compound in a homogeneous or heterogeneous assay system without further sample manipulation. For example, the technique of fluorescence energy transfer may be utilized (see, *e.g.*, Lakowicz *et al*, U.S. Patent No. 5,631,169; Stavrianopoulos *et al*, U.S. Patent No.

4,868,103). Generally, this technique involves the addition of a fluorophore label on a first 'donor' molecule (*e.g.*, marker or test compound) such that its emitted fluorescent energy will be absorbed by a fluorescent label on a second, 'acceptor' molecule (*e.g.*, marker or test compound), which in turn is able to fluoresce due to the absorbed energy.

- 5 Alternately, the 'donor' protein molecule may simply utilize the natural fluorescent energy of tryptophan residues. Labels are chosen that emit different wavelengths of light, such that the 'acceptor' molecule label may be differentiated from that of the 'donor'. Since the efficiency of energy transfer between the labels is related to the distance separating the molecules, spatial relationships between the molecules can be
- 10 assessed. In a situation in which binding occurs between the molecules, the fluorescent emission of the 'acceptor' molecule label in the assay should be maximal. An FET binding event can be conveniently measured through standard fluorometric detection means well known in the art (*e.g.*, using a fluorimeter). A test substance which either enhances or hinders participation of one of the species in the preformed complex will
- 15 result in the generation of a signal variant to that of background. In this way, test substances that modulate interactions between a marker and its binding partner can be identified in controlled assays.

- In another embodiment, modulators of marker expression are identified in a method wherein a cell is contacted with a candidate compound and the expression of
- 20 mRNA or protein, corresponding to a marker in the cell, is determined. The level of expression of mRNA or protein in the presence of the candidate compound is compared to the level of expression of mRNA or protein in the absence of the candidate compound. The candidate compound can then be identified as a modulator of marker expression based on this comparison. For example, when expression of marker mRNA
- 25 or protein is greater (statistically significantly greater) in the presence of the candidate compound than in its absence, the candidate compound is identified as a stimulator of marker mRNA or protein expression. Conversely, when expression of marker mRNA or protein is less (statistically significantly less) in the presence of the candidate compound than in its absence, the candidate compound is identified as an inhibitor of
- 30 marker mRNA or protein expression. The level of marker mRNA or protein expression in the cells can be determined by methods described herein for detecting marker mRNA or protein.

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In another aspect, the invention pertains to a combination of two or more of the assays described herein. For example, a modulating agent can be identified using a cell-based or a cell free assay, and the ability of the agent to modulate the activity of a marker protein can be further confirmed *in vivo*, *e.g.*, in a whole animal model for cellular transformation and/or tumorigenesis.

This invention further pertains to novel agents identified by the above-described screening assays. Accordingly, it is within the scope of this invention to further use an agent identified as described herein in an appropriate animal model. For example, an agent identified as described herein (*e.g.*, an marker modulating agent, an antisense marker nucleic acid molecule, an marker-specific antibody, or an marker-binding partner) can be used in an animal model to determine the efficacy, toxicity, or side effects of treatment with such an agent. Alternatively, an agent identified as described herein can be used in an animal model to determine the mechanism of action of such an agent. Furthermore, this invention pertains to uses of novel agents identified by the above-described screening assays for treatments as described herein.

It is understood that appropriate doses of small molecule agents and protein or polypeptide agents depends upon a number of factors within the knowledge of the ordinarily skilled physician, veterinarian, or researcher. The dose(s) of these agents will vary, for example, depending upon the identity, size, and condition of the subject or sample being treated, further depending upon the route by which the composition is to be administered, if applicable, and the effect which the practitioner desires the agent to have upon the nucleic acid or polypeptide of the invention. Exemplary doses of a small molecule include milligram or microgram amounts per kilogram of subject or sample weight (*e.g.* about 1 microgram per kilogram to about 500 milligrams per kilogram, about 100 micrograms per kilogram to about 5 milligrams per kilogram, or about 1 microgram per kilogram to about 50 micrograms per kilogram). Exemplary doses of a protein or polypeptide include gram, milligram or microgram amounts per kilogram of subject or sample weight (*e.g.* about 1 microgram per kilogram to about 5 grams per kilogram, about 100 micrograms per kilogram to about 500 milligrams per kilogram, or about 1 milligram per kilogram to about 50 milligrams per kilogram). It is furthermore understood that appropriate doses of one of these agents depend upon the potency of the agent with respect to the expression or activity to be modulated. Such appropriate doses

can be determined using the assays described herein. When one or more of these agents is to be administered to an animal (*e.g.* a human) in order to modulate expression or activity of a polypeptide or nucleic acid of the invention, a physician, veterinarian, or researcher can, for example, prescribe a relatively low dose at first, subsequently
5 increasing the dose until an appropriate response is obtained. In addition, it is understood that the specific dose level for any particular animal subject will depend upon a variety of factors including the activity of the specific agent employed, the age, body weight, general health, gender, and diet of the subject, the time of administration, the route of administration, the rate of excretion, any drug combination, and the degree
10 of expression or activity to be modulated.

A pharmaceutical composition of the invention is formulated to be compatible with its intended route of administration. Examples of routes of administration include parenteral, *e.g.*, intravenous, intradermal, subcutaneous, oral (*e.g.*, inhalation), transdermal (topical), transmucosal, and rectal administration. Solutions or suspensions
15 used for parenteral, intradermal, or subcutaneous application can include the following components: a sterile diluent such as water for injection, saline solution, fixed oils, polyethylene glycols, glycerine, propylene glycol or other synthetic solvents; antibacterial agents such as benzyl alcohol or methyl parabens; antioxidants such as ascorbic acid or sodium bisulfite; chelating agents such as ethylenediamine-tetraacetic
20 acid; buffers such as acetates, citrates or phosphates and agents for the adjustment of tonicity such as sodium chloride or dextrose. pH can be adjusted with acids or bases, such as hydrochloric acid or sodium hydroxide. The parenteral preparation can be enclosed in ampules, disposable syringes or multiple dose vials made of glass or plastic.

Pharmaceutical compositions suitable for injectable use include sterile aqueous
25 solutions (where water soluble) or dispersions and sterile powders for the extemporaneous preparation of sterile injectable solutions or dispersions. For intravenous administration, suitable carriers include physiological saline, bacteriostatic water, Cremophor EL (BASF; Parsippany, NJ) or phosphate buffered saline (PBS). In all cases, the composition must be sterile and should be fluid to the extent that easy
30 syringability exists. It must be stable under the conditions of manufacture and storage and must be preserved against the contaminating action of microorganisms such as bacteria and fungi. The carrier can be a solvent or dispersion medium containing, for

example, water, ethanol, polyol (for example, glycerol, propylene glycol, and liquid polyethylene glycol, and the like), and suitable mixtures thereof. The proper fluidity can be maintained, for example, by the use of a coating such as lecithin, by the maintenance of the required particle size in the case of dispersion and by the use of surfactants.

- 5 Prevention of the action of microorganisms can be achieved by various antibacterial and antifungal agents, for example, parabens, chlorobutanol, phenol, ascorbic acid, thimerosal, and the like. In many cases, it will be preferable to include isotonic agents, for example, sugars, polyalcohols such as mannitol, sorbitol, or sodium chloride in the composition. Prolonged absorption of the injectable compositions can be brought about
10 by including in the composition an agent which delays absorption, for example, aluminum monostearate and gelatin.

- Sterile injectable solutions can be prepared by incorporating the active compound (*e.g.*, a polypeptide or antibody) in the required amount in an appropriate solvent with one or a combination of ingredients enumerated above, as required,
15 followed by filtered sterilization. Generally, dispersions are prepared by incorporating the active compound into a sterile vehicle which contains a basic dispersion medium, and then incorporating the required other ingredients from those enumerated above. In the case of sterile powders for the preparation of sterile injectable solutions, the preferred methods of preparation are vacuum drying and freeze-drying which yields a
20 powder of the active ingredient plus any additional desired ingredient from a previously sterile-filtered solution thereof.

- Oral compositions generally include an inert diluent or an edible carrier. They can be enclosed in gelatin capsules or compressed into tablets. For the purpose of oral therapeutic administration, the active compound can be incorporated with excipients and
25 used in the form of tablets, troches, or capsules. Oral compositions can also be prepared using a fluid carrier for use as a mouthwash, wherein the compound in the fluid carrier is applied orally and swished and expectorated or swallowed.

- Pharmaceutically compatible binding agents, and/or adjuvant materials can be included as part of the composition. The tablets, pills, capsules, troches, and the like can
30 contain any of the following ingredients, or compounds of a similar nature: a binder such as microcrystalline cellulose, gum tragacanth or gelatin; an excipient such as starch or lactose, a disintegrating agent such as alginic acid, Primogel, or corn starch; a

lubricant such as magnesium stearate or Sterotes; a glidant such as colloidal silicon dioxide; a sweetening agent such as sucrose or saccharin; or a flavoring agent such as peppermint, methyl salicylate, or orange flavoring.

For administration by inhalation, the compounds are delivered in the form of an aerosol spray from a pressurized container or dispenser which contains a suitable propellant, *e.g.*, a gas such as carbon dioxide, or a nebulizer.

Systemic administration can also be by transmucosal or transdermal means. For transmucosal or transdermal administration, penetrants appropriate to the barrier to be permeated are used in the formulation. Such penetrants are generally known in the art, and include, for example, for transmucosal administration, detergents, bile salts, and fusidic acid derivatives. Transmucosal administration can be accomplished through the use of nasal sprays or suppositories. For transdermal administration, the active compounds are formulated into ointments, salves, gels, or creams as generally known in the art.

The compounds can also be prepared in the form of suppositories (*e.g.*, with conventional suppository bases such as cocoa butter and other glycerides) or retention enemas for rectal delivery.

In one embodiment, the active compounds are prepared with carriers that will protect the compound against rapid elimination from the body, such as a controlled release formulation, including implants and microencapsulated delivery systems. Biodegradable, biocompatible polymers can be used, such as ethylene vinyl acetate, polyanhydrides, polyglycolic acid, collagen, polyorthoesters, and polylactic acid. Methods for preparation of such formulations will be apparent to those skilled in the art. The materials can also be obtained commercially from Alza Corporation and Nova Pharmaceuticals, Inc. Liposomal suspensions (including liposomes having monoclonal antibodies incorporated therein or thereon) can also be used as pharmaceutically acceptable carriers. These can be prepared according to methods known to those skilled in the art, for example, as described in U.S. Patent No. 4,522,811.

It is especially advantageous to formulate oral or parenteral compositions in dosage unit form for ease of administration and uniformity of dosage. Dosage unit form as used herein refers to physically discrete units suited as unitary dosages for the subject to be treated; each unit containing a predetermined quantity of active compound

calculated to produce the desired therapeutic effect in association with the required pharmaceutical carrier. The specification for the dosage unit forms of the invention are dictated by and directly dependent on the unique characteristics of the active compound and the particular therapeutic effect to be achieved, and the limitations inherent in the art of compounding such an active compound for the treatment of individuals.

For antibodies, the preferred dosage is 0.1 mg/kg to 100 mg/kg of body weight (generally 10 mg/kg to 20 mg/kg). If the antibody is to act in the brain, a dosage of 50 mg/kg to 100 mg/kg is usually appropriate. Generally, partially human antibodies and fully human antibodies have a longer half-life within the human body than other antibodies. Accordingly, lower dosages and less frequent administration is often possible. Modifications such as lipidation can be used to stabilize antibodies and to enhance uptake and tissue penetration (*e.g.*, into the ovarian epithelium). A method for lipidation of antibodies is described by Cruikshank *et al.* (1997) *J. Acquired Immune Deficiency Syndromes and Human Retrovirology* 14:193.

The nucleic acid molecules corresponding to a marker of the invention can be inserted into vectors and used as gene therapy vectors. Gene therapy vectors can be delivered to a subject by, for example, intravenous injection, local administration (U.S. Patent 5,328,470), or by stereotactic injection (see, *e.g.*, Chen *et al.*, 1994, *Proc. Natl. Acad. Sci. USA* 91:3054-3057). The pharmaceutical preparation of the gene therapy vector can include the gene therapy vector in an acceptable diluent, or can comprise a slow release matrix in which the gene delivery vehicle is imbedded. Alternatively, where the complete gene delivery vector can be produced intact from recombinant cells, *e.g.* retroviral vectors, the pharmaceutical preparation can include one or more cells which produce the gene delivery system.

The pharmaceutical compositions can be included in a container, pack, or dispenser together with instructions for administration.

V. Predictive Medicine

The present invention pertains to the field of predictive medicine in which diagnostic assays, prognostic assays, pharmacogenomics, and monitoring clinical trials are used for prognostic (predictive) purposes to thereby treat an individual prophylactically. Accordingly, one aspect of the present invention relates to diagnostic

assays for determining the level of expression of polypeptides or nucleic acids corresponding to one or more markers of the invention, in order to determine whether an individual is at risk of developing ovarian cancer. Such assays can be used for prognostic or predictive purposes to thereby prophylactically treat an individual prior to the onset of the cancer.

Yet another aspect of the invention pertains to monitoring the influence of agents (e.g., drugs or other compounds administered either to inhibit ovarian cancer or to treat or prevent any other disorder {i.e. in order to understand any ovarian carcinogenic effects that such treatment may have}) on the expression or activity of a marker of the invention in clinical trials. These and other agents are described in further detail in the following sections.

A. Diagnostic Assays

An exemplary method for detecting the presence or absence of a polypeptide or nucleic acid corresponding to a marker of the invention in a biological sample involves obtaining a biological sample (e.g. an ovary-associated body fluid) from a test subject and contacting the biological sample with a compound or an agent capable of detecting the polypeptide or nucleic acid (e.g., mRNA, genomic DNA, or cDNA). The detection methods of the invention can thus be used to detect mRNA, protein, cDNA, or genomic DNA, for example, in a biological sample *in vitro* as well as *in vivo*. For example, *in vitro* techniques for detection of mRNA include Northern hybridizations and *in situ* hybridizations. *In vitro* techniques for detection of a polypeptide corresponding to a marker of the invention include enzyme linked immunosorbent assays (ELISAs), Western blots, immunoprecipitations and immunofluorescence. *In vitro* techniques for detection of genomic DNA include Southern hybridizations. Furthermore, *in vivo* techniques for detection of a polypeptide corresponding to a marker of the invention include introducing into a subject a labeled antibody directed against the polypeptide. For example, the antibody can be labeled with a radioactive marker whose presence and location in a subject can be detected by standard imaging techniques.

A general principle of such diagnostic and prognostic assays involves preparing a sample or reaction mixture that may contain a marker, and a probe, under appropriate conditions and for a time sufficient to allow the marker and probe to interact and bind,

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thus forming a complex that can be removed and/or detected in the reaction mixture. These assays can be conducted in a variety of ways.

For example, one method to conduct such an assay would involve anchoring the marker or probe onto a solid phase support, also referred to as a substrate, and detecting target marker/probe complexes anchored on the solid phase at the end of the reaction. In one embodiment of such a method, a sample from a subject, which is to be assayed for presence and/or concentration of marker, can be anchored onto a carrier or solid phase support. In another embodiment, the reverse situation is possible, in which the probe can be anchored to a solid phase and a sample from a subject can be allowed to react as an unanchored component of the assay.

There are many established methods for anchoring assay components to a solid phase. These include, without limitation, marker or probe molecules which are immobilized through conjugation of biotin and streptavidin. Such biotinylated assay components can be prepared from biotin-NHS (N-hydroxy-succinimide) using techniques known in the art (*e.g.*, biotinylation kit, Pierce Chemicals, Rockford, IL), and immobilized in the wells of streptavidin-coated 96 well plates (Pierce Chemical). In certain embodiments, the surfaces with immobilized assay components can be prepared in advance and stored.

Other suitable carriers or solid phase supports for such assays include any material capable of binding the class of molecule to which the marker or probe belongs. Well-known supports or carriers include, but are not limited to, glass, polystyrene, nylon, polypropylene, nylon, polyethylene, dextran, amylases, natural and modified celluloses, polyacrylamides, gabbros, and magnetite.

In order to conduct assays with the above mentioned approaches, the non-immobilized component is added to the solid phase upon which the second component is anchored. After the reaction is complete, uncomplexed components may be removed (*e.g.*, by washing) under conditions such that any complexes formed will remain immobilized upon the solid phase. The detection of marker/probe complexes anchored to the solid phase can be accomplished in a number of methods outlined herein.

In a preferred embodiment, the probe, when it is the unanchored assay component, can be labeled for the purpose of detection and readout of the assay, either directly or indirectly, with detectable labels discussed herein and which are well-known to one skilled in the art.

- 5 It is also possible to directly detect marker/probe complex formation without further manipulation or labeling of either component (marker or probe), for example by utilizing the technique of fluorescence energy transfer (see, for example, Lakowicz *et al.*, U.S. Patent No. 5,631,169; Stavrianopoulos, *et al.*, U.S. Patent No. 4,868,103). A fluorophore label on the first, 'donor' molecule is selected such that, upon excitation
10 with incident light of appropriate wavelength, its emitted fluorescent energy will be absorbed by a fluorescent label on a second 'acceptor' molecule, which in turn is able to fluoresce due to the absorbed energy. Alternately, the 'donor' protein molecule may simply utilize the natural fluorescent energy of tryptophan residues. Labels are chosen that emit different wavelengths of light, such that the 'acceptor' molecule label may be
15 differentiated from that of the 'donor'. Since the efficiency of energy transfer between the labels is related to the distance separating the molecules, spatial relationships between the molecules can be assessed. In a situation in which binding occurs between the molecules, the fluorescent emission of the 'acceptor' molecule label in the assay should be maximal. An FET binding event can be conveniently measured through
20 standard fluorometric detection means well known in the art (*e.g.*, using a fluorimeter).

- In another embodiment, determination of the ability of a probe to recognize a marker can be accomplished without labeling either assay component (probe or marker) by utilizing a technology such as real-time Biomolecular Interaction Analysis (BIA) (see, *e.g.*, Sjolander, S. and Urbaniczky, C., 1991, *Anal. Chem.* 63:2338-2345 and
25 Szabo *et al.*, 1995, *Curr. Opin. Struct. Biol.* 5:699-705). As used herein, "BIA" or "surface plasmon resonance" is a technology for studying biospecific interactions in real time, without labeling any of the interactants (*e.g.*, BIAcore). Changes in the mass at the binding surface (indicative of a binding event) result in alterations of the refractive index of light near the surface (the optical phenomenon of surface plasmon resonance (SPR)),
30 resulting in a detectable signal which can be used as an indication of real-time reactions between biological molecules.

Alternatively, in another embodiment, analogous diagnostic and prognostic assays can be conducted with marker and probe as solutes in a liquid phase. In such an assay, the complexed marker and probe are separated from uncomplexed components by any of a number of standard techniques, including but not limited to: differential

5 centrifugation, chromatography, electrophoresis and immunoprecipitation. In differential centrifugation, marker/probe complexes may be separated from uncomplexed assay components through a series of centrifugal steps, due to the different sedimentation equilibria of complexes based on their different sizes and densities (see, for example, Rivas, G., and Minton, A.P., 1993, *Trends Biochem Sci.* 18(8):284-7).

10 Standard chromatographic techniques may also be utilized to separate complexed molecules from uncomplexed ones. For example, gel filtration chromatography separates molecules based on size, and through the utilization of an appropriate gel filtration resin in a column format, for example, the relatively larger complex may be separated from the relatively smaller uncomplexed components. Similarly, the

15 relatively different charge properties of the marker/probe complex as compared to the uncomplexed components may be exploited to differentiate the complex from uncomplexed components, for example through the utilization of ion-exchange chromatography resins. Such resins and chromatographic techniques are well known to one skilled in the art (see, e.g., Heegaard, N.H., 1998, *J. Mol. Recognit.* Winter 11(1-

20 6):141-8; Hage, D.S., and Tweed, S.A. *J Chromatogr B Biomed Sci Appl* 1997 Oct 10;699(1-2):499-525). Gel electrophoresis may also be employed to separate complexed assay components from unbound components (see, e.g., Ausubel *et al.*, ed., *Current Protocols in Molecular Biology*, John Wiley & Sons, New York, 1987-1999). In this technique, protein or nucleic acid complexes are separated based on size or

25 charge, for example. In order to maintain the binding interaction during the electrophoretic process, non-denaturing gel matrix materials and conditions in the absence of reducing agent are typically preferred. Appropriate conditions to the particular assay and components thereof will be well known to one skilled in the art.

In a particular embodiment, the level of mRNA corresponding to the marker can

30 be determined both by *in situ* and by *in vitro* formats in a biological sample using methods known in the art. The term "biological sample" is intended to include tissues, cells, biological fluids and isolates thereof, isolated from a subject, as well as tissues,

cells and fluids present within a subject. Many expression detection methods use isolated RNA. For *in vitro* methods, any RNA isolation technique that does not select against the isolation of mRNA can be utilized for the purification of RNA from ovarian cells (see, *e.g.*, Ausubel *et al.*, ed., *Current Protocols in Molecular Biology*, John Wiley & Sons, New York 1987-1999). Additionally, large numbers of tissue samples can readily be processed using techniques well known to those of skill in the art, such as, for example, the single-step RNA isolation process of Chomczynski (1989, U.S. Patent No. 4,843,155).

The isolated mRNA can be used in hybridization or amplification assays that include, but are not limited to, Southern or Northern analyses, polymerase chain reaction analyses and probe arrays. One preferred diagnostic method for the detection of mRNA levels involves contacting the isolated mRNA with a nucleic acid molecule (probe) that can hybridize to the mRNA encoded by the gene being detected. The nucleic acid probe can be, for example, a full-length cDNA, or a portion thereof, such as an oligonucleotide of at least 7, 15, 30, 50, 100, 250 or 500 nucleotides in length and sufficient to specifically hybridize under stringent conditions to a mRNA or genomic DNA encoding a marker of the present invention. Other suitable probes for use in the diagnostic assays of the invention are described herein. Hybridization of an mRNA with the probe indicates that the marker in question is being expressed.

In one format, the mRNA is immobilized on a solid surface and contacted with a probe, for example by running the isolated mRNA on an agarose gel and transferring the mRNA from the gel to a membrane, such as nitrocellulose. In an alternative format, the probe(s) are immobilized on a solid surface and the mRNA is contacted with the probe(s), for example, in an Affymetrix gene chip array. A skilled artisan can readily adapt known mRNA detection methods for use in detecting the level of mRNA encoded by the markers of the present invention.

An alternative method for determining the level of mRNA corresponding to a marker of the present invention in a sample involves the process of nucleic acid amplification, *e.g.*, by rtPCR (the experimental embodiment set forth in Mullis, 1987, U.S. Patent No. 4,683,202), ligase chain reaction (Barany, 1991, *Proc. Natl. Acad. Sci. USA*, 88:189-193), self sustained sequence replication (Guatelli *et al.*, 1990, *Proc. Natl. Acad. Sci. USA* 87:1874-1878), transcriptional amplification system (Kwoh *et al.*, 1989,

Proc. Natl. Acad. Sci. USA 86:1173-1177), Q-Beta Replicase (Lizardi *et al.*, 1988, *Bio/Technology* 6:1197), rolling circle replication (Lizardi *et al.*, U.S. Patent No. 5,854,033) or any other nucleic acid amplification method, followed by the detection of the amplified molecules using techniques well known to those of skill in the art. These detection schemes are especially useful for the detection of nucleic acid molecules if such molecules are present in very low numbers. As used herein, amplification primers are defined as being a pair of nucleic acid molecules that can anneal to 5' or 3' regions of a gene (plus and minus strands, respectively, or vice-versa) and contain a short region in between. In general, amplification primers are from about 10 to 30 nucleotides in length and flank a region from about 50 to 200 nucleotides in length. Under appropriate conditions and with appropriate reagents, such primers permit the amplification of a nucleic acid molecule comprising the nucleotide sequence flanked by the primers.

For *in situ* methods, mRNA does not need to be isolated from the ovarian cells prior to detection. In such methods, a cell or tissue sample is prepared/processed using known histological methods. The sample is then immobilized on a support, typically a glass slide, and then contacted with a probe that can hybridize to mRNA that encodes the marker.

As an alternative to making determinations based on the absolute expression level of the marker, determinations may be based on the normalized expression level of the marker. Expression levels are normalized by correcting the absolute expression level of a marker by comparing its expression to the expression of a gene that is not a marker, *e.g.*, a housekeeping gene that is constitutively expressed. Suitable genes for normalization include housekeeping genes such as the actin gene, or epithelial cell-specific genes. This normalization allows the comparison of the expression level in one sample, *e.g.*, a patient sample, to another sample, *e.g.*, a non-ovarian cancer sample, or between samples from different sources.

Alternatively, the expression level can be provided as a relative expression level. To determine a relative expression level of a marker, the level of expression of the marker is determined for 10 or more samples of normal versus cancer cell isolates, preferably 50 or more samples, prior to the determination of the expression level for the sample in question. The mean expression level of each of the genes assayed in the larger number of samples is determined and this is used as a baseline expression level

for the marker. The expression level of the marker determined for the test sample (absolute level of expression) is then divided by the mean expression value obtained for that marker. This provides a relative expression level.

Preferably, the samples used in the baseline determination will be from ovarian cancer or from non-ovarian cancer cells of ovarian tissue. The choice of the cell source is dependent on the use of the relative expression level. Using expression found in normal tissues as a mean expression score aids in validating whether the marker assayed is ovarian specific (versus normal cells). In addition, as more data is accumulated, the mean expression value can be revised, providing improved relative expression values based on accumulated data. Expression data from ovarian cells provides a means for grading the severity of the ovarian cancer state.

In another embodiment of the present invention, a polypeptide corresponding to a marker is detected. A preferred agent for detecting a polypeptide of the invention is an antibody capable of binding to a polypeptide corresponding to a marker of the invention, preferably an antibody with a detectable label. Antibodies can be polyclonal, or more preferably, monoclonal. An intact antibody, or a fragment thereof (*e.g.*, Fab or F(ab')₂) can be used. The term "labeled", with regard to the probe or antibody, is intended to encompass direct labeling of the probe or antibody by coupling (*i.e.*, physically linking) a detectable substance to the probe or antibody, as well as indirect labeling of the probe or antibody by reactivity with another reagent that is directly labeled. Examples of indirect labeling include detection of a primary antibody using a fluorescently labeled secondary antibody and end-labeling of a DNA probe with biotin such that it can be detected with fluorescently labeled streptavidin.

Proteins from ovarian cells can be isolated using techniques that are well known to those of skill in the art. The protein isolation methods employed can, for example, be such as those described in Harlow and Lane (Harlow and Lane, 1988, *Antibodies: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York).

A variety of formats can be employed to determine whether a sample contains a protein that binds to a given antibody. Examples of such formats include, but are not limited to, enzyme immunoassay (EIA), radioimmunoassay (RIA), Western blot analysis and enzyme linked immunoabsorbant assay (ELISA). A skilled artisan can

readily adapt known protein/antibody detection methods for use in determining whether ovarian cells express a marker of the present invention.

In one format, antibodies, or antibody fragments, can be used in methods such as Western blots or immunofluorescence techniques to detect the expressed proteins. In such uses, it is generally preferable to immobilize either the antibody or proteins on a solid support. Suitable solid phase supports or carriers include any support capable of binding an antigen or an antibody. Well-known supports or carriers include glass, polystyrene, polypropylene, polyethylene, dextran, nylon, amylases, natural and modified celluloses, polyacrylamides, gabbros, and magnetite.

One skilled in the art will know many other suitable carriers for binding antibody or antigen, and will be able to adapt such support for use with the present invention. For example, protein isolated from ovarian cells can be run on a polyacrylamide gel electrophoresis and immobilized onto a solid phase support such as nitrocellulose. The support can then be washed with suitable buffers followed by treatment with the detectably labeled antibody. The solid phase support can then be washed with the buffer a second time to remove unbound antibody. The amount of bound label on the solid support can then be detected by conventional means.

The invention also encompasses kits for detecting the presence of a polypeptide or nucleic acid corresponding to a marker of the invention in a biological sample (e.g. an ovary-associated body fluid such as a urine sample). Such kits can be used to determine if a subject is suffering from or is at increased risk of developing ovarian cancer. For example, the kit can comprise a labeled compound or agent capable of detecting a polypeptide or an mRNA encoding a polypeptide corresponding to a marker of the invention in a biological sample and means for determining the amount of the polypeptide or mRNA in the sample (e.g., an antibody which binds the polypeptide or an oligonucleotide probe which binds to DNA or mRNA encoding the polypeptide). Kits can also include instructions for interpreting the results obtained using the kit.

For antibody-based kits, the kit can comprise, for example: (1) a first antibody (e.g., attached to a solid support) which binds to a polypeptide corresponding to a marker of the invention; and, optionally, (2) a second, different antibody which binds to either the polypeptide or the first antibody and is conjugated to a detectable label.

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For oligonucleotide-based kits, the kit can comprise, for example: (1) an oligonucleotide, *e.g.*, a detectably labeled oligonucleotide, which hybridizes to a nucleic acid sequence encoding a polypeptide corresponding to a marker of the invention or (2) a pair of primers useful for amplifying a nucleic acid molecule corresponding to a marker of the invention. The kit can also comprise, *e.g.*, a buffering agent, a preservative, or a protein stabilizing agent. The kit can further comprise components necessary for detecting the detectable label (*e.g.*, an enzyme or a substrate). The kit can also contain a control sample or a series of control samples which can be assayed and compared to the test sample. Each component of the kit can be enclosed within an individual container and all of the various containers can be within a single package, along with instructions for interpreting the results of the assays performed using the kit.

B. Pharmacogenomics

Agents or modulators which have a stimulatory or inhibitory effect on expression of a marker of the invention can be administered to individuals to treat (prophylactically or therapeutically) ovarian cancer in the patient. In conjunction with such treatment, the pharmacogenomics (*i.e.*, the study of the relationship between an individual's genotype and that individual's response to a foreign compound or drug) of the individual may be considered. Differences in metabolism of therapeutics can lead to severe toxicity or therapeutic failure by altering the relation between dose and blood concentration of the pharmacologically active drug. Thus, the pharmacogenomics of the individual permits the selection of effective agents (*e.g.*, drugs) for prophylactic or therapeutic treatments based on a consideration of the individual's genotype. Such pharmacogenomics can further be used to determine appropriate dosages and therapeutic regimens. Accordingly, the level of expression of a marker of the invention in an individual can be determined to thereby select appropriate agent(s) for therapeutic or prophylactic treatment of the individual.

Pharmacogenomics deals with clinically significant variations in the response to drugs due to altered drug disposition and abnormal action in affected persons. See, *e.g.*, Linder (1997) *Clin. Chem.* 43(2):254-266. In general, two types of pharmacogenetic conditions can be differentiated. Genetic conditions transmitted as a single factor altering the way drugs act on the body are referred to as "altered drug action." Genetic

conditions transmitted as single factors altering the way the body acts on drugs are referred to as "altered drug metabolism". These pharmacogenetic conditions can occur either as rare defects or as polymorphisms. For example, glucose-6-phosphate dehydrogenase (G6PD) deficiency is a common inherited enzymopathy in which the
5 main clinical complication is hemolysis after ingestion of oxidant drugs (anti-malarials, sulfonamides, analgesics, nitrofurans) and consumption of fava beans.

As an illustrative embodiment, the activity of drug metabolizing enzymes is a major determinant of both the intensity and duration of drug action. The discovery of genetic polymorphisms of drug metabolizing enzymes (*e.g.*, N-acetyltransferase 2 (NAT
10 2) and cytochrome P450 enzymes CYP2D6 and CYP2C19) has provided an explanation as to why some patients do not obtain the expected drug effects or show exaggerated drug response and serious toxicity after taking the standard and safe dose of a drug. These polymorphisms are expressed in two phenotypes in the population, the extensive metabolizer (EM) and poor metabolizer (PM). The prevalence of PM is different among
15 different populations. For example, the gene coding for CYP2D6 is highly polymorphic and several mutations have been identified in PM, which all lead to the absence of functional CYP2D6. Poor metabolizers of CYP2D6 and CYP2C19 quite frequently experience exaggerated drug response and side effects when they receive standard doses. If a metabolite is the active therapeutic moiety, a PM will show no therapeutic
20 response, as demonstrated for the analgesic effect of codeine mediated by its CYP2D6-formed metabolite morphine. The other extreme are the so called ultra-rapid metabolizers who do not respond to standard doses. Recently, the molecular basis of ultra-rapid metabolism has been identified to be due to CYP2D6 gene amplification.

Thus, the level of expression of a marker of the invention in an individual can be
25 determined to thereby select appropriate agent(s) for therapeutic or prophylactic treatment of the individual. In addition, pharmacogenetic studies can be used to apply genotyping of polymorphic alleles encoding drug-metabolizing enzymes to the identification of an individual's drug responsiveness phenotype. This knowledge, when applied to dosing or drug selection, can avoid adverse reactions or therapeutic failure
30 and thus enhance therapeutic or prophylactic efficiency when treating a subject with a modulator of expression of a marker of the invention.

C. Monitoring Clinical Trials

Monitoring the influence of agents (*e.g.*, drug compounds) on the level of expression of a marker of the invention can be applied not only in basic drug screening, but also in clinical trials. For example, the effectiveness of an agent to affect marker expression can be monitored in clinical trials of subjects receiving treatment for ovarian cancer. In a preferred embodiment, the present invention provides a method for monitoring the effectiveness of treatment of a subject with an agent (*e.g.*, an agonist, antagonist, peptidomimetic, protein, peptide, nucleic acid, small molecule, or other drug candidate) comprising the steps of (i) obtaining a pre-administration sample from a subject prior to administration of the agent; (ii) detecting the level of expression of one or more selected markers of the invention in the pre-administration sample; (iii) obtaining one or more post-administration samples from the subject; (iv) detecting the level of expression of the marker(s) in the post-administration samples; (v) comparing the level of expression of the marker(s) in the pre-administration sample with the level of expression of the marker(s) in the post-administration sample or samples; and (vi) altering the administration of the agent to the subject accordingly. For example, increased administration of the agent can be desirable to increase expression of the marker(s) to higher levels than detected, *i.e.*, to increase the effectiveness of the agent. Alternatively, decreased administration of the agent can be desirable to decrease expression of the marker(s) to lower levels than detected, *i.e.*, to decrease the effectiveness of the agent.

D. Surrogate Markers

The markers of the invention may serve as surrogate markers for one or more disorders or disease states or for conditions leading up to disease states, and in particular, ovarian cancer. As used herein, a "surrogate marker" is an objective biochemical marker which correlates with the absence or presence of a disease or disorder, or with the progression of a disease or disorder (*e.g.*, with the presence or absence of a tumor). The presence or quantity of such markers is independent of the disease. Therefore, these markers may serve to indicate whether a particular course of treatment is effective in lessening a disease state or disorder. Surrogate markers are of particular use when the presence or extent of a disease state or disorder is difficult to

assess through standard methodologies (e.g., early stage tumors), or when an assessment of disease progression is desired before a potentially dangerous clinical endpoint is reached (e.g., an assessment of cardiovascular disease may be made using cholesterol levels as a surrogate marker, and an analysis of HIV infection may be made using HIV RNA levels as a surrogate marker, well in advance of the undesirable clinical outcomes of myocardial infarction or fully-developed AIDS). Examples of the use of surrogate markers in the art include: Koomen *et al.* (2000) *J. Mass. Spectrom.* 35: 258-264; and James (1994) *AIDS Treatment News Archive* 209.

The markers of the invention are also useful as pharmacodynamic markers. As used herein, a "pharmacodynamic marker" is an objective biochemical marker which correlates specifically with drug effects. The presence or quantity of a pharmacodynamic marker is not related to the disease state or disorder for which the drug is being administered; therefore, the presence or quantity of the marker is indicative of the presence or activity of the drug in a subject. For example, a pharmacodynamic marker may be indicative of the concentration of the drug in a biological tissue, in that the marker is either expressed or transcribed or not expressed or transcribed in that tissue in relationship to the level of the drug. In this fashion, the distribution or uptake of the drug may be monitored by the pharmacodynamic marker. Similarly, the presence or quantity of the pharmacodynamic marker may be related to the presence or quantity of the metabolic product of a drug, such that the presence or quantity of the marker is indicative of the relative breakdown rate of the drug *in vivo*. Pharmacodynamic markers are of particular use in increasing the sensitivity of detection of drug effects, particularly when the drug is administered in low doses. Since even a small amount of a drug may be sufficient to activate multiple rounds of marker transcription or expression, the amplified marker may be in a quantity which is more readily detectable than the drug itself. Also, the marker may be more easily detected due to the nature of the marker itself; for example, using the methods described herein, antibodies may be employed in an immune-based detection system for a protein marker, or marker-specific radiolabeled probes may be used to detect a mRNA marker. Furthermore, the use of a pharmacodynamic marker may offer mechanism-based prediction of risk due to drug treatment beyond the range of possible direct observations. Examples of the use of pharmacodynamic markers in the art include:

Matsuda *et al.* US 6,033,862; Hattis *et al.* (1991) *Env. Health Perspect.* 90: 229-238; Schentag (1999) *Am. J. Health-Syst. Pharm.* 56 Suppl. 3: S21-S24; and Nicolau (1999) *Am. J. Health-Syst. Pharm.* 56 Suppl. 3: S16-S20.

The markers of the invention are also useful as pharmacogenomic markers. As used herein, a “pharmacogenomic marker” is an objective biochemical marker which correlates with a specific clinical drug response or susceptibility in a subject (see, e.g., McLeod *et al.* (1999) *Eur. J. Cancer* 35(12): 1650-1652). The presence or quantity of the pharmacogenomic marker is related to the predicted response of the subject to a specific drug or class of drugs prior to administration of the drug. By assessing the presence or quantity of one or more pharmacogenomic markers in a subject, a drug therapy which is most appropriate for the subject, or which is predicted to have a greater degree of success, may be selected. For example, based on the presence or quantity of RNA or protein for specific tumor markers in a subject, a drug or course of treatment may be selected that is optimized for the treatment of the specific tumor likely to be present in the subject. Similarly, the presence or absence of a specific sequence mutation in marker DNA may correlate with drug response. The use of pharmacogenomic markers therefore permits the application of the most appropriate treatment for each subject without having to administer the therapy.

20 E. Computer Readable Means and Arrays

Computer readable media comprising a marker of the present invention is also provided. As used herein, “computer readable media” refers to any medium that can be read and accessed directly by a computer. Such media include, but are not limited to: magnetic storage media, such as floppy discs, hard disc storage medium, and magnetic tape; optical storage media such as CD-ROM; electrical storage media such as RAM and ROM; and hybrids of these categories such as magnetic/optical storage media. The skilled artisan will readily appreciate how any of the presently known computer readable mediums can be used to create a manufacture comprising computer readable medium having recorded thereon a marker of the present invention.

As used herein, "recorded" refers to a process for storing information on computer readable medium. Those skilled in the art can readily adopt any of the presently known methods for recording information on computer readable medium to generate manufactures comprising the markers of the present invention.

5 A variety of data processor programs and formats can be used to store the marker information of the present invention on computer readable medium. For example, the nucleic acid sequence corresponding to the markers can be represented in a word processing text file, formatted in commercially-available software such as WordPerfect and MicroSoft Word, or represented in the form of an ASCII file, stored in a database
10 application, such as DB2, Sybase, Oracle, or the like. Any number of dataprocessor structuring formats (e.g., text file or database) may be adapted in order to obtain computer readable medium having recorded thereon the markers of the present invention.

By providing the markers of the invention in computer readable form, one can
15 routinely access the marker sequence information for a variety of purposes. For example, one skilled in the art can use the nucleotide or amino acid sequences of the present invention in computer readable form to compare a target sequence or target structural motif with the sequence information stored within the data storage means. Search means are used to identify fragments or regions of the sequences of the invention
20 which match a particular target sequence or target motif.

The invention also includes an array comprising a marker of the present invention. The array can be used to assay expression of one or more genes in the array. In one embodiment, the array can be used to assay gene expression in a tissue to ascertain tissue specificity of genes in the array. In this manner, up to about 7600 genes
25 can be simultaneously assayed for expression. This allows a profile to be developed showing a battery of genes specifically expressed in one or more tissues.

In addition to such qualitative determination, the invention allows the quantitation of gene expression. Thus, not only tissue specificity, but also the level of expression of a battery of genes in the tissue is ascertainable. Thus, genes can be
30 grouped on the basis of their tissue expression *per se* and level of expression in that tissue. This is useful, for example, in ascertaining the relationship of gene expression between or among tissues. Thus, one tissue can be perturbed and the effect on gene

expression in a second tissue can be determined. In this context, the effect of one cell type on another cell type in response to a biological stimulus can be determined. Such a determination is useful, for example, to know the effect of cell-cell interaction at the level of gene expression. If an agent is administered therapeutically to treat one cell type but has an undesirable effect on another cell type, the invention provides an assay to determine the molecular basis of the undesirable effect and thus provides the opportunity to co-administer a counteracting agent or otherwise treat the undesired effect. Similarly, even within a single cell type, undesirable biological effects can be determined at the molecular level. Thus, the effects of an agent on expression of other than the target gene can be ascertained and counteracted.

In another embodiment, the array can be used to monitor the time course of expression of one or more genes in the array. This can occur in various biological contexts, as disclosed herein, for example development and differentiation, tumor progression, progression of other diseases, *in vitro* processes, such a cellular transformation and senescence, autonomic neural and neurological processes, such as, for example, pain and appetite, and cognitive functions, such as learning or memory.

The array is also useful for ascertaining the effect of the expression of a gene on the expression of other genes in the same cell or in different cells. This provides, for example, for a selection of alternate molecular targets for therapeutic intervention if the ultimate or downstream target cannot be regulated.

The array is also useful for ascertaining differential expression patterns of one or more genes in normal and abnormal cells. This provides a battery of genes that could serve as a molecular target for diagnosis or therapeutic intervention.

VI. Experimental Protocol

A. Subtracted Libraries

Subtracted libraries are generated using a PCR based method that allows the isolation of clones expressed at higher levels in one population of mRNA (tester) compared to another population (driver). Both tester and driver mRNA populations are converted into cDNA by reverse transcription, and then PCR amplified using the SMART PCR kit from Clontech. Tester and driver cDNAs are then hybridized using

the PCR-Select cDNA subtraction kit from Clontech. This technique results in both subtraction and normalization, which is an equalization of copy number of low-abundance and high-abundance sequences. After generation of the subtractive libraries, a group of 96 or more clones from each library is tested to confirm differential

5 expression by reverse Southern hybridization.

A first group of regular cDNA libraries was constructed. Library johOa was constructed from a pool of 5 normal ovarian epithelial cell cultures. Library johOb was constructed from a pool of 5 ascites short cultured samples from ovarian cancer patients. Library johOc was constructed from a pool of 6 serous late stage (III/IV) tumor samples.

10 Three subtracted libraries were generated from these libraries: johOd, johOe and johOf. The johOd library was a subtracted ascites library, where the tester was johOb, and the driver was johOa. The johOe and johOf libraries were both subtracted stage III/IV serous tumor libraries. The tester for both of these libraries was johOc, and the driver was a pooled RNA from normal tissues. The tissues used for this driver pool were:

15 kidney, small intestine, prostate, lung, heart, muscle, spleen, pancreas, liver, and lymphocyte. Library cMhOg was the same as the johOc and johOf libraries, with the exception that normal ovary was added to the driver. cMhOh, i, j, and k are all stage I/II subtracted libraries made from pooled tumor RNAs of different histological types (h=serous, I=endometrioid, j=clear cell, k=mucinous). The driver was the same for these
20 4 libraries. It consisted of normal ovarian epithelial RNA and PBML RNA.

SEQ ID NOS: 1-2795 (Tables 1 and 1A) were identified through the above-described subtractive library hybridization techniques. In Tables 1 and 1A, SEQ ID NOS: 1-773 were from Library johOd; SEQ ID NOS: 774-1331 were from Library johOe; SEQ ID NOS: 1332-2795 were from Libraries johOf.

25 SEQ ID NOS: 2796-10795 (Table 6) and 10796-10808 (Table 6A) were also identified through the above-described subtractive library hybridization techniques. In Table 6, SEQ ID NOS: 2796-3789 were from Library cMhOg; SEQ ID NOS: 3790-6301 were from Library cMhoh; SEQ ID NOS: 6302-8108 were from Libraries cMhoi; SEQ ID NOS: 8109-9981 were from Library cMhoj; SEQ ID NOS: 9982-10795 were
30 from Libraries cMhok.

B. Transcript Profiling

Nylon arrays were prepared by spotting purified PCR product onto a nylon membrane using a robotic gridding system linked to a sample database. Several thousand clones were spotted on each nylon filter.

- 5 RNA or DNA from clinical samples (tumor and normal), and cell lines as well as from subtracted libraries, were used for hybridization against the nylon arrays. The RNA or DNA is labeled utilizing an *in vitro* reverse transcription reaction that contains a radiolabeled nucleotide that is incorporated during the reaction. Hybridization experiments were carried out by combining labeled RNA or DNA samples with nylon
10 filters in a hybridization chamber. Duplicate, independent hybridization experiments were performed to generate transcriptional profiling data. See, *Nature Genetics*, 21 (1999).

C. Proteomics

- 15 Proteins that are secreted by normal and transformed cells in culture are analyzed to identify those proteins that are likely to be secreted by cancerous cells into body fluids. Supernatants are isolated and MWT-CO filters are used to simplify the mixture of proteins. The proteins are then digested with trypsin. The tryptic peptides are loaded onto a microcapillary HPLC column where they are separated, and eluted
20 directly into an ion trap mass spectrometer, through a custom-made electrospray ionization source. Throughout the gradient, sequence data is acquired through fragmentation of the four most intense ions (peptides) that elute off the column, while dynamically excluding those that have already been fragmented. In this way, approximately 2000 scans worth of sequence data are obtained, corresponding to
25 approximately 50 to 200 different proteins in the sample. These data are searched against databases using correlation analysis tools, such as MS-Tag, to identify the proteins in the supernatants.

- The markers of Tables 7A-7E were identified through the above-described proteomics protocol. In particular, the proteins set forth in Tables 7A-7E were identified
30 and their expression was analyzed in seven short term cultures of ovarian cancer cells (jov891N, jov915N, jov915p6N, jov928N, jov860N, jov908N and jov926N) and six

ovarian cancer cell lines (ov17TotN, ov167TotN, ov177TotN, ov202TotN, ov207TotN and ov266TotN).

D. Identification of Novel Genes

5 Sequences which displayed an increase in expression in [any one of] twelve late stage ovarian tumor samples over the corresponding average expression of four non-tumor samples were blasted against both public and proprietary sequence databases in order to identify other sequences with significant overlap. Contiguous sequences were then assembled into full length genes (cDNAs). Those cDNAs in which the potential
10 open reading frame was still open at the 5' end were experimentally extended by either 5' RACE PCR or extracted from full length cDNA libraries by a PCR reaction between the vector and 5' end of the assembled electronic sequence. To predict whether an assembled gene encodes a potential integral membrane protein or not, hydropathy predictions of the predicted open reading frame was performed. If the open reading
15 frame contained a predicted signal peptide in the N-terminal portion and a single membrane spanning domain, it was labeled as being a potential type I transmembrane protein. If the predicted amino acid sequence contained a transmembrane domain in the N-terminal portion of the protein, it was labeled as being a potential type II transmembrane protein. If the predicted amino acid sequence was a short hydrophobic
20 protein (<50 amino acids), such as CD52 (CAMPATH), it was labeled as a potential integral membrane protein. If the predicted amino acid sequence contained multiple membrane spanning regions it was labeled as a type III transmembrane protein.

The novel genes of Table 8 were identified through the above-described procedure.

25

E. Northern Blot Analysis

Northern blots were performed for several of the genes of Table 8 to analyze for expression in normal human tissues. A clone was picked and served as a template for generation of probes for Northern blots. The probes were radiolabeled using ³²PdCTP
30 using standard procedures and hybridized to Clontech (Palo Alto, California) human multiple tissue northern. Clontech Human MTN blot (catalog # 7760-1) contains heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Human 12-Lane

MTN blot (catalog # 7780-1) contains brain, heart, skeletal muscle, colon, thymus, spleen, kidney, liver, small intestine, placenta, lung, peripheral blood leukocytes.

Human MTN blot II (#7759-1) contains spleen, thymus, prostate, testis, ovary, small intestine, colon, and peripheral blood leukocytes. The hybridization and wash

5 conditions used were as described in the Clontech Multiple Tissue Northern (MTN) Blot User Manual (Catalogue number PT1200-1). Kodak biomax film was exposed to the Northern blot membrane for 10-72 hours, which were then developed.

Tables 10A-10N summarize the Northern blot analysis performed for several of the novel genes of Table 8.

10

F. Gene Expression Analysis

Total RNA from normal human tissue was obtained from commercial sources.

The integrity of the RNA was verified by agarose gel electrophoresis and ethidium bromide staining. Cell lines were purchased from ATCC and grown under the

15 conditions recommended by ATCC. Total RNA from a number of various breast, ovarian and prostate adenocarcinoma cell lines was prepared using commercial kits (Qiagen). First strand cDNA was prepared using oligo-dT primer and standard conditions. Each RNA preparation was treated with DNase I (Ambion) at 37°C for 1 hour.

20 Novel gene expression was measured by TaqMan[®] quantitative PCR (Perkin Elmer Applied Biosystems) in cDNA prepared from the following normal human tissues: prostate, cerebellum, breast, ovary, kidney, trachea, adipose, small intestine, thyroid, testis, placenta, spinal cord, cervix, esophagus, spleen, thymus, brain, lung, skeletal muscle, heart, mammary gland, salivary gland, stomach, uterus, adrenal gland, bladder, medulla hippocampus, and liver from one or two adult donors. Furthermore, novel gene expression was analyzed in the following cell lines: ZR-75-30, CAMA-1, MDA-MB-157, MDA-MB-175VII, MDA-MB-231, MDA-MB-361, SK-BR-3, BT-483, BT-549, DU4475, Hs578Bst, Hs578T, MDA-MB-453, T-47D, ES-2, Caov-3, SK-OV-3, NIH:OVCA-3, HTB-78, CRL-1572, CRL-10303, CA-HPV-10, CA-HPV-7, DU145, 30 MCF-7 and MDA-MB-468.

PCR Probes were designed by PrimerExpress software (PE Biosystems) based on the disclosed sequences of each novel human kinase gene. The primers and probes for expression analysis of the novel genes in Table 8 are given below:

5 Marker 10

Forward primer: F GATGACTTGAGAGAAGGTGCACAGT
Reverse primer: R AAGGACAAGTGTGTTTGGCTTCA
TaqMan probe: P TTTGATGCAGGCTGCTGGTCTTGG

10 Marker 15

Forward primer: F TGCAGCAGCCTGTGTATGC
Reverse primer: R AAACAGCGACACGACAGTGAA
TaqMan probe: P TTGGCTCCGGTATCGTCAACACGG

15 Marker 19

Forward primer: F AGTTCATCACGATATCAGGGAAGAT
Reverse primer: R TGAATGATTACTGCCGATGTAGCT
TaqMan probe: P CAAAGAGCCGTACGTCCACTGCCAGA

20 Marker 5

Forward primer: F GGCTGCTTTGCTGCAACTG
Reverse primer: R CAGAGCGGGCAGCAGAATA
TaqMan Probe P ACCCCGCACAGACAAGCCTTACTCC

25 Marker 8

Forward primer F TGTGTGCTGAAGGCTACATGTTG
Reverse primer R TCTCCATGGCTGGTTTCCA
TaqMan Probe P TTCTTACAGTCAGGTATTTGTAATCGCCCT

30 Marker 25

Forward Primer F CTCCCACCCCTTCTTCAATG
Reverse primer R AGCTGTACTCTGCCGGTTTCTC
TaqMan Probe P ACCTTCGACTATGACATCGCGCTGCT

Marker 39

Forward primer	F	CCCGGAATGTGGTTTATGGTATT
Reverse primer	R	GACCGTCTTGTGTGGAGTGAAG
TaqMan Probe	P	CCTTTCCTTGACCTCTATCGCAACCCGAA

5

An internal reference gene 18S rRNA was used. Primers and probe were purchased pretested from PE Applied Biosystems. Each gene probe was labeled using FAM (6-carboxyfluorescein), and the β 2-microglobulin reference probe was labeled with a different fluorescent dye, VIC. The differential labeling of the target gene and internal reference gene thus enabled measurement in same well. Forward and reverse primers and the probes for both 18S rRNA and target gene were added to the TaqMan® Universal PCR Master Mix (PE Applied Biosystems). Although the final concentration of primer and probe could vary, each was internally consistent within a given experiment. A typical experiment contained 900 nM of forward and reverse primers plus 250nM probe for the target gene whereas primers and probe for 18S rRNA were used according to manufacturer's recommendations. TaqMan matrix experiments were carried out on an ABI PRISM 7700 Sequence Detection System (PE Applied Biosystems). The thermal cycler conditions were as follows: hold for 2 min at 50°C and 10 min at 95°C, followed by two-step PCR for 40 cycles of 95°C for 15 sec followed by 60°C for 1 min.

The following method was used to quantitatively calculate gene expression in the various tissues relative to 18S rRNA expression in the same tissue. The threshold cycle (Ct) value is defined as the cycle at which a statistically significant increase in fluorescence is detected. A lower Ct value is indicative of a higher mRNA concentration. The Ct value of a given gene ($C_{t_{\text{marker}}}$) is normalized by subtracting the Ct value of the 18S rRNA gene to obtain a ΔC_t value using the following formula: $\Delta C_t = C_{t_{\text{marker}}} - C_{t_{\beta 18S \text{ rRNA}}}$. Expression is then calibrated against a no template control sample. The ΔC_t value for the calibrator sample is then subtracted from ΔC_t for each tissue sample according to the following formula: $\Delta \Delta C_t = \Delta C_t_{\text{sample}} - \Delta C_t_{\text{calibrator}}$. Relative expression is then calculated using the arithmetic formula given by $2^{-\Delta \Delta C_t}$. Table 9 graphically represents the results of the TaqMan® expression study.

G. LightCycler

The LightCycler Instrument from Boehringer Mannheim GmbH, Mannheim is a thermocycler for the rapid analysis of PCR applications. Fluorimetric analysis of the PCR products formed is performed as "real time" measurement either continuously or at a specifically defined time during each PCR cycle. The three detection channels of the LightCycler are fitted with filter combinations which allow analysis at the given emission wavelengths, thereby enabling exact sample measurement to be carried out in parallel with the fluorophores. SYBR Green I is a dye specific for double-stranded DNA. Its inherent fluorescence is enhanced by binding to the minor groove to ds DNA. The addition of SYBR Green I to PCR reactions allows the detection of PCR products formed by the binding of this fluorophore during each phase of DNA synthesis. The point of time of fluorimetric measurement is determined at the end of the elongation phase. The LightCycler- FastStart DNA Master SYBR Green I kit manufactured by Roche was used in order to quantify the copy number of a specific target. A panel of tumors and normal tissues were used to detect the expression levels of specific markers of the present invention in ovarian tumor samples compared to normal. The results are set forth in Table 11.

H. RT-PCR

The Gibco BRL Superscript first strand synthesis system was used for RT-PCR to synthesize first strand cDNA from total RNA of ovarian tumors as well as normal ovary. Gene specific primers were designed for clones of the present invention using software program Oligo5.1. Finished sequence for these clones was available by in house sequencing efforts. Following the use of this system, target cDNA was amplified with the gene specific primers. Presence of a band in a sample indicates that the gene is upregulated in that particular tissue or tumor. Table 11 summarizes the RT-PCR data.

VII. Summary of the Data Provided in the Tables

The level of expression of numerous potential markers (*i.e.* "the markers of the invention") in cells obtained from seven patients afflicted with ovarian cancer, and in cells of six ovarian cancer cell lines (*i.e.* a total of thirteen sample sources) were

compared with levels of expression of the same markers in non-cancerous ovarian cell samples. Markers for which significant differences in the levels of expression in cancer-related samples and non-cancerous samples were observed are listed in the Tables.

Tables 1 and 1A list markers that were identified in subtractive libraries and
5 which are preferentially expressed in ovarian cancer cells over normal (*i.e.* non-cancerous) ovarian cells.

Table 2A lists markers, expression of which was increased by at least 5-fold in at least one of twenty-three ovarian cancer samples tested, relative to its expression in normal (*i.e.* non-cancerous) ovarian samples. Table 2B lists markers, expression of
10 which was increased by at least 2-fold in all twenty-three ovarian cancer samples tested, relative to its expression in normal ovarian samples. Table 2C lists markers, expression of which was increased by at least 5-fold in at least 6 of the 23 ovarian cancer samples tested, relative to its expression in normal ovarian cells. Table 2D lists markers,
15 expression of which was increased by at least 5-fold in at least 6 of the 23 ovarian cancer samples, relative to expression in normal ovarian samples, and which can serve as antigens for embodiments of the invention based upon proteomic studies, sequence analysis and/or literature references.

Table 3A lists markers, expression of which was decreased by at least 5-fold in at least one of twenty-three ovarian cancer samples tested, relative to its expression in
20 normal (*i.e.* non-cancerous) ovarian cells. Table 3B lists markers, expression of which was decreased by at least 2-fold in all twenty-three ovarian cancer samples tested, relative to its expression in normal ovarian cells. Table 3C lists markers, expression of which was decreased by at least 5-fold in at least 6 of the 23 ovarian cancer samples tested, relative to its expression in normal (*i.e.* non-cancerous) ovarian cells.

25 Tables 4 and 5 list markers, expression of which was either increased (Table 4) or decreased (Table 5) in ovarian cancer samples, relative to expression in normal (*i.e.*, non-cancerous) ovarian samples. In particular, expression of the markers in 37 tumors (7 endometrioid tumors, 5 clear cell tumors and 25 serous tumors) was evaluated. A ranking system based on the sum of the number of tumors multiplied by the fold
30 regulation (for 2-fold, 3-fold, 5-fold and 10-fold regulation), divided by the total number of tumors, was employed. A rank score was generated for four categories, endometrioid tumors, clear cell tumors, serous tumors and overall.

The markers of Table 4 had a score of greater than 1.5 for endometroid tumors, greater than 1.5 for clear cell tumors, greater than 1 for serous tumors, or greater than 0.8 overall. Table 4A shows the markers of Table 4 with a score of greater than 3 in any of the four categories.

- 5 The markers of Table 5 had a score of greater than 2.5 for endometroid tumors, greater than 2.5 for clear cell tumors, greater than 2 for serous tumors, or greater than 1.75 overall. Table 5A shows the markers of Table 5 with a score of greater than 3 in any of the four categories.

- 10 Tables 6 and 6A list markers that were identified in subtractive libraries and which are preferentially expressed in ovarian cancer cells over normal (i.e. non-cancerous ovarian cells).

Table 7A-7E show markers of the present invention obtained through proteomic analysis as described in Section VI., subsection C., above.

- 15 Table 8 lists the nucleotide sequences of 24 novel genes identified as described in Section VI., subsection D, above.

Table 9 depicts the results of the TaqMan® expression analysis obtained as described in Section VI., subsection F, above.

Tables 10A-10N contain Northern blot analysis data obtained as described in Section VI., subsection E, above.

- 20 Table 10A shows Marker 5 expression in normal human tissue samples. The highest level of expression is seen in placenta, followed by trachea, prostate, mammary gland, and lung, with lower levels in kidney, salivary gland, small intestine, and bladder, and an even lower level of expression in normal ovary tissue.

- 25 Table 10B shows that Marker 5 is expressed in several cancer cell lines. The highest level of expression is seen in SK-BR-3, followed by T-47D, BT-483, and ZR-75-30.

- 30 Table 10C shows Marker 8 expression in wide range of normal human tissue samples. The highest level of expression was seen in cerebellum, followed by placenta, prostate, and lung. Lower levels of expression were seen in kidney, spleen, testis, whole brain, and trachea, followed by mammary gland, small intestine, and thymus, which were higher than the level of expression in normal ovary tissue.

Table 10D shows that Marker 8 is expressed in all the cancer cell lines tested, with the highest levels of expression in DU4475, followed by MDA-MB-361 line.

Table 10E shows Marker 10 expression was detected in all tissue samples tested. The highest level of expression was seen in trachea, followed by testis and prostate.

- 5 Lower levels of expression were seen in whole brain, salivary gland, cerebellum, and small intestine. Expression in normal ovary tissue was among the lowest levels observed.

- 10 Table 10F shows that Marker 10 expression was detected in all cancer cell lines tested, with the highest levels of expression in MDA-MB-361, followed by MDA-MB-468, and HTB-78.

Table 10G shows a limited distribution of expression of Marker 15 in the panel of normal tissues tested, with significant expression only in placenta, and much lower levels of expression in whole brain, cerebellum, and prostate. No detectable levels of expression were seen in normal ovarian tissue.

- 15 Table 10H shows that Marker 15 expression was detected in all cancer cell lines tested, with the highest levels of expression seen in HTB-78, followed by MDA-MB-361, SK-BR-3, Caov-3, and MDA-MB-231.

- 20 Table 10I shows that expression of Marker 19 in the panel of normal human tissues tested was much higher in testis than in prostate and whole brain. Lower, but detectable, levels of expression were seen in a number of other tissues, with ovary among the lowest.

- 25 Table 10J shows that expression of Marker 19 was seen in 22 of the 26 cancer cell lines tested. The highest levels of expression were seen in BT549 and DU145, followed by NIH-Ovcar-3 and HTB-78. Lower levels of expression were seen in MDA-MB-453, MDA-MB-361, and T-470.

- 30 Table 10K shows that high levels of expression of Marker 25 in the panel of normal human tested were seen in placenta, prostate, and trachea, followed by kidney, lung, and small intestine. Lower levels of expression were seen in salivary gland, spleen, thymus, and bladder. Expression in normal ovarian tissue was just above background.

Table 10L shows that expression of Marker 25 was detected in 20 of the 26 cancer cell lines tested. The highest level of expression was seen in T-470, followed by S-BR-3. Lower levels of expression were seen in Caov-3, MDA-MB-468, and HTB-78, followed by MDA-MB-453, MDA-MB-361, BT-483, DU4475, and NIH-Ovar-3.

5 Table 10M shows that the highest level of expression of Marker 039 was seen in whole brain, followed by cerebellum, with a lower level in prostate. Even lower levels were seen in a number of tissues, including kidney, liver, spleen, testis, thymus, trachea, and lung. Expression in normal ovarian tissue was among the lowest.

10 Table 10N shows that Marker 39 expression was detected in most of the cancer cell lines tested, with the highest level seen in SK-BR-3, followed by MDA-MB-361 and T470. Lower levels of expression were seen in all other cell lines tested, except for MDA-MB-157, Hs578Bst, Hs578T, and ES-2, in which no expression was detected.

Table 11 depicts the results of LightCycler data and RT-PCR data obtained as described in Section VI., subsections G. and H., respectively, above.

15 Tables 1-1, 2A-1, 2D-1, 3A-1, 4-1, 5-1 and 6-1 depict the accession number ("ACC Num") and database ("DATABASE") of the markers of the present invention with the corresponding GenBank GI number ("GI NBR"). One skilled in the art may thus obtain from the Tables of the invention, both GenBank accession number as well as the GenBank GI number for a marker of the present invention, thereby identifying the
20 nucleotide and/or polypeptide sequence of that marker. For example, the markers of Tables 1 and 1A are referenced in Table 1-1 by both GenBank accession number and GenBank GI number.

Those skilled in the art will readily understand the data set forth in the Tables of the present invention. In particular, the following definitions will be understood to
25 mean:

- 1) "ID #" or "#" is an arbitrary designation assigned to the marker.
- 2) "Image Clone ID" is the identification number assigned to the marker by the IMAGE Consortium (Lennon *et al.*, 1996, *Genomics* 33:151-152; see, *e.g.*, "<http://www-bio.llnl.gov/bbrp/image/image.html>" for further information). All referenced Image
30 Clone sequences are expressly incorporated by reference.
- 3) "GenBank Accession Number" or "Accession No." or "acc" or "Accession #" or "Acc Num" is the identification number assigned to the marker in the relevant database

(see, e.g. "http://www.ncbi.nlm.nih.gov/genbank/query_form.html" and "www.derwent.com" for further information). "GenBank Gi" or "GI NB" is the GI identification number assigned to the marker in the GenBank database (see *supra*). All referenced database sequences are expressly incorporated herein by reference.

- 5 4) "Secreted?" or "Secreted" indicates whether the protein corresponding to the marker has been demonstrated to be secreted in protein profiling experiments.
- 5) "Secretion Predicted?" indicates whether the protein corresponding to the marker is predicted, using the SIGNALP computer software described herein, to have at least one portion which is exposed to the extracellular medium upon expression of the protein.
- 10 6) "Ave-Normal-Exp" indicates the average marker expression in the non-cancerous samples.
- 7) "Max expression" and "Min-expression" indicates the highest (or lowest) marker expression value of all samples.
- 8) "Max fold up" and "Max fold-up down" indicates the highest fold positive (or
15 negative) induction of regulation of the marker of all samples.
- 9) "Count-up tumors" and "Count-down tumors" indicate the total number of the twenty-three tumor samples that the marker was up (or down) regulated.
- 10) "Count-up cell lines" and "Count-down cell lines" indicated the total number of the six cell lines where the marker was up (or down) regulated.
- 20 11) "Chromosome" indicates the chromosome on which the genomic sequence corresponding to the marker is located, where this location is known.
- 12) "Location" indicates the location on the chromosome at which the genomic sequence corresponding to the marker is located, where this location is known. The genes were mapped using radiation hybrid panel data that can be found in the art, for
25 example at "<http://www.sanger.ac.uk/HGP/Rhmap/>" and at "<http://www.ncbi.nlm.nih.gov/genemap99/>".
- 13) "Tissue Prominence" indicates up to three tissues in which expression of the marker is predicted, based on expression in the predicted tissues, of expressed sequence tags located in close proximity to the marker. The marker may also, or instead, be expressed
30 in tissues that are not listed in this section (*i.e.* this list is not exhaustive).

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14) "Database" or "dbase" refers to the relevant database where the nucleotide sequence may be found according to its accession number. These public databases include GenBank, dbEST (a division of GenBank), and NUCPATENT (a GENESEQ database, available through Derwent). For examples, see

- 5 <http://www.ncbi.nlm.nih.gov/Entrez/nucleotide.html> for GenBank and
www.derwent.com for GENESEQ. All referenced database sequences are expressly
10 incorporated herein by reference.

The contents of all references, patents, published patent applications, and database records including, GenBank, IMAGE consortium and GENESEQ database
10 records, cited throughout this application are hereby incorporated by reference.

Other Embodiments

Those skilled in the art will recognize, or be able to ascertain using no more than routine experimentation, many equivalents to the specific embodiments of the invention
15 described herein. Such equivalents are intended to be encompassed by the following claims.

What is claimed is:

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Claims

1. A method of assessing whether a patient is afflicted with ovarian cancer, the method comprising comparing:
- 5 a) the level of expression of a marker in a patient sample, wherein the marker is selected from the group consisting of the markers listed in Tables 1-11, and
- b) the normal level of expression of the marker in a control non-ovarian cancer sample,
- wherein a significant difference between the level of expression of the marker in
- 10 the patient sample and the normal level is an indication that the patient is afflicted with ovarian cancer.
2. The method of claim 1, wherein the marker is selected from the group consisting of the markers listed in Table 2C.
- 15 3. The method of claim 1, wherein the marker is selected from the group consisting of the markers listed in Table 2D.
4. The method of claim 1, wherein the marker is selected from the group
- 20 consisting of the markers listed in Table 3C.
5. The method of claim 1, wherein the marker is selected from the group consisting of the markers listed in Table 4A.
- 25 6. The method of claim 1, wherein the marker is selected from the group consisting of the markers listed in Table 5A.
7. The method of claim 1, wherein the marker is selected from the group consisting of the markers listed in Tables 6 and 6A.
- 30 8. The method of claim 1, wherein the marker is selected from the group consisting of the markers listed in Table 8.

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9. The method of claim 1, wherein the marker is selected from the group consisting of the markers listed in Tables 7A-7E.

10. The method of claim 1, wherein the marker corresponds to a secreted
5 protein.

11. The method of claim 10, wherein the marker is selected from the group consisting of the markers listed in Tables 7A-7E.

10 12. The method of claim 1, wherein the marker corresponds to a transcribed polynucleotide or portion thereof, wherein the polynucleotide comprises the marker.

13. The method of claim 1, wherein at least one tissue corresponding to the marker in the Tables is an epithelial tissue.
15

14. The method of claim 13, wherein at least one tissue corresponding to the marker in the Tables is an ovarian tissue.

15. The method of claim 1, wherein the marker is over- or under-expressed by at
20 least two-fold in at least about 20% of ovarian cancer patients.

16. The method of claim 1, wherein the marker is not significantly expressed in non-ovarian tissues.

25 17. The method of claim 1, wherein the patient sample is an ovary-associated body fluid.

18. The method of claim 13, wherein the ovary-associated body fluid is selected from the group consisting of blood fluid, lymph, ascitic fluid, gynecological fluid, cystic
30 fluid, urine, and a fluid collected by peritoneal rinsing.

19. The method of claim 1, wherein the sample comprises cells obtained from the patient.

20. The method of claim 19, wherein the cells are in a fluid selected from the group consisting of a fluid collected by peritoneal rinsing, a fluid collected by uterine rinsing, a uterine fluid, a uterine exudate, a pleural fluid, a cystic fluid, and an ovarian exudate.

21. The method of claim 1, wherein the level of expression of the marker in the sample is assessed by detecting the presence in the sample of a protein corresponding to the marker.

22. The method of claim 21, wherein the marker is selected from the group consisting of the markers listed in Tables 7A-7E and 8.

23. The method of claim 21, wherein the presence of the protein is detected using a reagent which specifically binds with the protein.

24. The method of claim 23, wherein the reagent is selected from the group consisting of an antibody, an antibody derivative, and an antibody fragment.

25. The method of claim 1, wherein the level of expression of the marker in the sample is assessed by detecting the presence in the sample of a transcribed polynucleotide or portion thereof, wherein the transcribed polynucleotide comprises the marker.

26. The method of claim 25, wherein the transcribed polynucleotide is an mRNA.

27. The method of claim 25, wherein the transcribed polynucleotide is a cDNA.

28. The method of claim 25, wherein the step of detecting further comprises amplifying the transcribed polynucleotide.

29. The method of claim 1, wherein the level of expression of the marker in the sample is assessed by detecting the presence in the sample of a transcribed polynucleotide which anneals with the marker or anneals with a portion of a polynucleotide wherein the polynucleotide comprises the marker, under stringent hybridization conditions.

30. The method of claim 1, wherein the level of expression of the marker in the sample differs from the normal level of expression of the marker in a patient not afflicted with ovarian cancer by a factor of at least about 2.

31. The method of claim 1, wherein the level of expression of the marker in the sample differs from the normal level of expression of the marker in a patient not afflicted with ovarian cancer by a factor of at least about 5.

32. The method of claim 1, comprising comparing:
a) the level of expression in the sample of each of a plurality of markers independently selected from the markers listed in Tables 1-11, and
b) the normal level of expression of each of the plurality of markers in samples of the same type obtained from control humans not afflicted with ovarian cancer, wherein the level of expression of more than one of the markers is significantly altered, relative to the corresponding normal levels of expression of the markers, is an indication that the patient is afflicted with ovarian cancer.

33. The method of claim 32, wherein the plurality comprises at least three of the markers.

34. The method of claim 32, wherein the plurality comprises at least five of the markers.

35. A method of assessing whether a patient is afflicted with ovarian cancer, the method comprising comparing:

5 a) the level of expression of a marker in a sample obtained from the patient, wherein the marker is selected from the group consisting of the markers listed in Tables 1-11 and

b) the normal level of expression of the marker in samples of the same type obtained from control humans not afflicted with ovarian cancer,

10 wherein a significantly different level of expression of the marker in the sample, relative to the normal level, is an indication that the patient is afflicted with ovarian cancer.

36. A method for monitoring the progression of ovarian cancer in a patient, the method comprising:

15 a) detecting in a patient sample at a first point in time, the expression of a marker, wherein the marker is selected from the group consisting of the markers listed in Tables 1-11;

b) repeating step a) at a subsequent point in time; and

c) comparing the level of expression detected in steps a) and b), and therefrom monitoring the progression of ovarian cancer in the patient.

20

37. The method of claim 36, wherein the marker is selected from the group consisting of the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8.

25 38. The method of claim 36, wherein the marker is selected from the group consisting of the markers listed in Tables 3A, 5, 7C and 7E.

39. The method of claim 36, wherein the marker corresponds to a secreted protein.

30 40. The method of claim 36, wherein marker corresponds to a transcribed polynucleotide or portion thereof, wherein the polynucleotide comprises the marker.

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41. The method of claim 36, wherein the patient sample is an ovary-associated body fluid.

42. The method of claim 36, wherein the sample comprises cells obtained from
5 the patient.

43. The method of claim 36, wherein between the first point in time and the subsequent point in time, the patient has undergone surgery to remove a tumor.

10 44. A method of assessing the efficacy of a test compound for inhibiting an ovarian cancer in a patient, the method comprising comparing:

a) expression of a marker in a first sample obtained from the patient and maintained in the presence of the test compound, wherein the marker is selected from the group consisting of the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and
15 8, and

b) expression of the marker in a second sample obtained from the patient and maintained in the absence of the test compound,
wherein a significantly lower level of expression of the marker in the first sample, relative to the second sample, is an indication that the test compound is
20 efficacious for inhibiting ovarian cancer in the patient.

45. The method of claim 44, wherein the first and second samples are portions of a single sample obtained from the patient.

25 46. The method of claim 44, wherein the first and second samples are portions of pooled samples obtained from the patient.

47. A method of assessing the efficacy of a test compound for inhibiting ovarian cancer in a patient, the method comprising comparing:

- a) expression of a marker in a first sample obtained from the patient and maintained in the presence of the test compound, wherein the marker is selected from the group consisting of the markers listed in Tables 3A, 5, 7C and 7E, and
 - b) expression of the marker in a second sample obtained from the patient and maintained in the absence of the test compound,
- wherein a significantly enhanced level of expression of the marker in the first sample, relative to the second sample, is an indication that the test compound is efficacious for inhibiting ovarian cancer in the patient.

48. A method of assessing the efficacy of a therapy for inhibiting ovarian cancer in a patient, the method comprising comparing:

- a) expression of a marker in the first sample obtained from the patient prior to providing at least a portion of the therapy to the patient, wherein the marker is selected from the group consisting of the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8, and
 - b) expression of the marker in a second sample obtained from the patient following provision of the portion of the therapy,
- wherein a significantly lower level of expression of the marker in the second sample, relative to the first sample, is an indication that the therapy is efficacious for inhibiting ovarian cancer in the patient.

49. A method of assessing the efficacy of a therapy for inhibiting ovarian cancer in a patient, the method comprising comparing:

- a) expression of a marker in the first sample obtained from the patient prior to providing at least a portion of the therapy to the patient, wherein the marker is selected from the group consisting of the markers listed in Tables 3A, 5, 7C and 7E, and

b) expression of the marker in a second sample obtained from the patient following provision of the portion of the therapy,

wherein a significantly enhanced level of expression of the marker in the second sample, relative to the first sample, is an indication that the therapy is efficacious for
5 inhibiting ovarian cancer in the patient.

50. A method of selecting a composition for inhibiting ovarian cancer in a patient, the method comprising:

- a) obtaining a sample comprising cancer cells from the patient;
- 10 b) separately maintaining aliquots of the sample in the presence of a plurality of test compositions;
- c) comparing expression of a marker in each of the aliquots, wherein the marker is selected from the group consisting of the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8; and
- 15 d) selecting one of the test compositions which induces a lower level of expression of the marker in the aliquot containing that test composition, relative to other test compositions.

51. A method of selecting a composition for inhibiting ovarian cancer in a
20 patient, the method comprising:

- a) obtaining a sample comprising cancer cells from the patient;
- b) separately maintaining aliquots of the sample in the presence of a plurality of test compositions;
- c) comparing expression of a marker in each of the aliquots, wherein the marker
25 is selected from the group consisting of the markers listed in Tables 3A, 5, 7C and 7E; and
- d) selecting one of the test compositions which induces an enhanced level of expression of the marker in the aliquot containing that test composition, relative to other test compositions.

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52. A method of inhibiting ovarian cancer in a patient, the method comprising:
- a) obtaining a sample comprising cancer cells from the patient;
 - b) separately maintaining aliquots of the sample in the presence of a plurality of test compositions;
 - 5 c) comparing expression of a marker in each of the aliquots, wherein the marker is selected from the group consisting of the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8, and
 - d) administering to the patient at least one of the test compositions which induces a lower level of expression of the marker in the aliquot containing that test composition,
 - 10 relative to other test compositions.
53. A method of selecting a composition for inhibiting ovarian cancer in a patient, the method comprising:
- a) obtaining a sample comprising cancer cells from the patient;
 - 15 b) separately maintaining aliquots of the sample in the presence of a plurality of test compositions;
 - c) comparing expression of a marker in each of the aliquots, wherein the marker is selected from the group consisting of the markers listed in Tables 3A, 5, 7C and 7E, and
 - 20 d) administering to the patient at least one of the test compositions which induces an enhanced level of expression of the marker in the aliquot containing that test composition, relative to other test compositions.
54. A kit for assessing the suitability of each of a plurality of compounds for
- 25 inhibiting ovarian cancer in a patient, the kit comprising:
- a) the plurality of compounds; and
 - b) a reagent for assessing expression of a marker selected from the group consisting of the markers listed in Tables 1-11.
55. A kit for assessing whether a patient is afflicted with ovarian cancer, the kit comprising reagents for assessing expression of a marker selected from the group consisting of the markers listed in Tables 1-11.
- 30

56. A method of making an isolated hybridoma which produces an antibody useful for assessing whether a patient is afflicted with ovarian cancer, the method comprising:

- 5 isolating a protein corresponding to a marker selected from the group consisting of the markers listed in Tables 1-11;
immunizing a mammal using the isolated protein;
isolating splenocytes from the immunized mammal;
fusing the isolated splenocytes with an immortalized cell line to form
10 hybridomas; and
screening individual hybridomas for production of an antibody which specifically binds with the protein to isolate the hybridoma.

57. The method of claim 56, wherein the marker is selected from the group
15 consisting of the members listed in Tables 7A-7E and 8.

58. An antibody produced by a hybridoma made by the method of claim 56.

59. A kit for assessing the presence of human ovarian cancer cells, the kit
20 comprising an antibody, wherein the antibody specifically binds with a protein corresponding to a marker selected from the group consisting of the markers listed in Tables 1-11.

60. A kit for assessing the presence of ovarian cancer cells, the kit comprising a
25 nucleic acid probe wherein the probe specifically binds with a transcribed polynucleotide corresponding to a marker selected from the group consisting of the markers listed in Tables 1-11.

61. A method of assessing the ovarian cell carcinogenic potential of a test compound, the method comprising:

a) maintaining separate aliquots of ovarian cells in the presence and absence of the test compound; and

5 b) comparing expression of a marker in each of the aliquots, wherein the marker is selected from the group consisting of the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8, and

 wherein a significantly enhanced level of expression of the marker in the aliquot maintained in the presence of the test compound, relative to the aliquot maintained in the
10 absence of the test compound, is an indication that the test compound possesses human ovarian cell carcinogenic potential.

62. A method of assessing the ovarian cell carcinogenic potential of a test compound, the method comprising:

15 a) maintaining separate aliquots of ovarian cells in the presence and absence of the test compound; and

 b) comparing expression of a marker in each of the aliquots, wherein the marker is selected from the group consisting of the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8, and

20 wherein a significantly lower level of expression of the marker in the aliquot maintained in the presence of the test compound, relative to the aliquot maintained in the absence of the test compound, is an indication that the test compound possesses ovarian cell carcinogenic potential.

25 63. A kit for assessing the ovarian cell carcinogenic potential of a test compound, the kit comprising ovarian cells and a reagent for assessing expression of a marker, wherein the marker is selected from the group consisting of the markers listed in Tables 1-11.

30 64. A method of treating a patient afflicted with ovarian cancer, the method comprising providing to cells of the cancer a protein corresponding to a marker selected from the markers listed in Tables 3A, 5, 7C and 7E.

65. The method of claim 62, wherein the protein is provided to the cells by providing a vector comprising a polynucleotide encoding the protein to the cells.

66. A method of treating a patient afflicted with ovarian cancer, the method comprising providing to cells of the patient an antisense oligonucleotide complementary to a polynucleotide corresponding to a marker selected from the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8.

67. A method of inhibiting ovarian cancer in a patient at risk for developing ovarian cancer, the method comprising inhibiting expression of a gene corresponding to a marker selected from the markers listed in Tables 1, 1A, 2A, 4, 6, 6A, 7A, 7B, 7D and 8.

68. A method of inhibiting ovarian cancer in a patient at risk for developing ovarian cancer, the method comprising enhancing expression of a gene corresponding to a marker selected from the markers listed in Tables 3A, 5, 7C and 7E.

69. An isolated nucleic acid molecule selected from the group consisting of:
a) a nucleic acid molecule comprising a nucleotide sequence which is at least 90% homologous to a nucleotide sequence of Table 8, or a complement thereof;
b) a nucleic acid molecule comprising a fragment of a nucleic acid molecule comprising the nucleotide sequence of Table 8, or a complement thereof; and
c) a nucleic acid molecule comprising the nucleotide sequence of Table 8, or a complement thereof.

25

70. A vector which contains a nucleic acid molecule of claim 69.

71. A host cell which contains a nucleic acid molecule of claim 69.

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72. An isolated polypeptide which is encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 90% homologous to a nucleic acid comprising the nucleotide sequence of Table 8.

5 73. An antibody which selectively binds to a polypeptide of claim 72.

Table 1

Patent Sequence Number	Accession Number	Sequence 50	AA111907
Sequence 1	AA001066	Sequence 51	AA112043
Sequence 2	AA007157	Sequence 52	AA112308
Sequence 3	AA010954	Sequence 53	AA112375
Sequence 4	AA015792	Sequence 54	AA113860
Sequence 5	AA019769	Sequence 55	AA114120
Sequence 6	AA019948	Sequence 56	AA115118
Sequence 7	AA022925	Sequence 57	AA115368
Sequence 8	AA022937	Sequence 58	AA122286
Sequence 9	AA024405	Sequence 59	AA122348
Sequence 10	AA029750	Sequence 60	AA126109
Sequence 11	AA031509	Sequence 61	AA127105
Sequence 12	AA033876	Sequence 62	AA127132
Sequence 13	AA034237	Sequence 63	AA127418
Sequence 14	AA039967	Sequence 64	AA128305
Sequence 15	AA040073	Sequence 65	AA129461
Sequence 16	AA040122	Sequence 66	AA130252
Sequence 17	AA045732	Sequence 67	AA130547
Sequence 18	AA045861	Sequence 68	AA130786
Sequence 19	AA046835	Sequence 69	AA131041
Sequence 20	AA047026	Sequence 70	AA131065
Sequence 21	AA047417	Sequence 71	AA131104
Sequence 22	AA053486	Sequence 72	AA131155
Sequence 23	AA054658	Sequence 73	AA131160
Sequence 24	AA055606	Sequence 74	AA132182
Sequence 25	AA056113	Sequence 75	AA132568
Sequence 26	AA056176	Sequence 76	AA132598
Sequence 27	AA056363	Sequence 77	AA133351
Sequence 28	AA056431	Sequence 78	AA133927
Sequence 29	AA065336	Sequence 79	AA134105
Sequence 30	AA069781	Sequence 80	AA134210
Sequence 31	AA069784	Sequence 81	AA135032
Sequence 32	AA069839	Sequence 82	AA135919
Sequence 33	AA069983	Sequence 83	AA136383
Sequence 34	AA071255	Sequence 84	AA136789
Sequence 35	AA075135	Sequence 85	AA143609
Sequence 36	AA081655	Sequence 86	AA146773
Sequence 37	AA082245	Sequence 87	AA147806
Sequence 38	AA083471	Sequence 88	AA148160
Sequence 39	AA083510	Sequence 89	AA148268
Sequence 40	AA085862	Sequence 90	AA148771
Sequence 41	AA085872	Sequence 91	AA149056
Sequence 42	AA085947	Sequence 92	AA150307
Sequence 43	AA088770	Sequence 93	AA151310
Sequence 44	AA100333	Sequence 94	AA151775
Sequence 45	AA100719	Sequence 95	AA152037
Sequence 46	AA100793	Sequence 96	AA152416
Sequence 47	AA100852	Sequence 97	AA155853
Sequence 48	AA101270	Sequence 98	AA155926
Sequence 49	AA101561	Sequence 99	AA157405
		Sequence 100	AA157725
		Sequence 101	AA157788

Table 1

Sequence 102	AA158165	Sequence 154	AA301631
Sequence 103	AA158171	Sequence 155	AA304669
Sequence 104	AA159272	Sequence 156	AA304961
Sequence 105	AA160114	Sequence 157	AA305193
Sequence 106	AA160685	Sequence 158	AA305438
Sequence 107	AA161410	Sequence 159	AA306542
Sequence 108	AA164405	Sequence 160	AA306708
Sequence 109	AA164465	Sequence 161	AA306945
Sequence 110	AA165083	Sequence 162	AA307239
Sequence 111	AA165629	Sequence 163	AA307477
Sequence 112	AA166973	Sequence 164	AA307504
Sequence 113	AA171510	Sequence 165	AA307697
Sequence 114	AA173031	Sequence 166	AA307779
Sequence 115	AA173470	Sequence 167	AA308062
Sequence 116	AA173630	Sequence 168	AA308801
Sequence 117	AA179462	Sequence 169	AA309028
Sequence 118	AA187003	Sequence 170	AA309988
Sequence 119	AA187958	Sequence 171	AA311006
Sequence 120	AA188591	Sequence 172	AA311481
Sequence 121	AA192108	Sequence 173	AA312012
Sequence 122	AA199710	Sequence 174	AA313684
Sequence 123	AA203224	Sequence 175	AA314146
Sequence 124	AA203284	Sequence 176	AA315049
Sequence 125	AA205851	Sequence 177	AA315308
Sequence 126	AA209431	Sequence 178	AA315426
Sequence 127	AA209531	Sequence 179	AA316682
Sequence 128	AA214075	Sequence 180	AA319958
Sequence 129	AA216612	Sequence 181	AA320346
Sequence 130	AA224230	Sequence 182	AA320991
Sequence 131	AA224985	Sequence 183	AA328544
Sequence 132	AA226502	Sequence 184	AA330457
Sequence 133	AA229225	Sequence 185	AA338793
Sequence 134	AA232626	Sequence 186	AA340069
Sequence 135	AA233843	Sequence 187	AA341170
Sequence 136	AA242891	Sequence 188	AA342394
Sequence 137	AA250725	Sequence 189	AA348250
Sequence 138	AA250982	Sequence 190	AA349148
Sequence 139	AA256959	Sequence 191	AA351443
Sequence 140	AA259077	Sequence 192	AA351880
Sequence 141	AA262440	Sequence 193	AA356158
Sequence 142	AA263110	Sequence 194	AA356187
Sequence 143	AA283165	Sequence 195	AA356195
Sequence 144	AA285260	Sequence 196	AA357374
Sequence 145	AA287112	Sequence 197	AA367446
Sequence 146	AA292191	Sequence 198	AA375236
Sequence 147	AA292334	Sequence 199	AA377718
Sequence 148	AA292385	Sequence 200	AA380997
Sequence 149	AA292771	Sequence 201	AA383917
Sequence 150	AA293273	Sequence 202	AA385147
Sequence 151	AA293572	Sequence 203	AA389641
Sequence 152	AA295348	Sequence 204	AA393164
Sequence 153	AA295485	Sequence 205	AA393236

Table 1

Sequence 206	AA394242	Sequence 258	AA568217
Sequence 207	AA398732	Sequence 259	AA573742
Sequence 208	AA401864	Sequence 260	AA573893
Sequence 209	AA410508	Sequence 261	AA574237
Sequence 210	AA410580	Sequence 262	AA576866
Sequence 211	AA410942	Sequence 263	AA579034
Sequence 212	AA411334	Sequence 264	AA579816
Sequence 213	AA411599	Sequence 265	AA581220
Sequence 214	AA418061	Sequence 266	AA581264
Sequence 215	AA418473	Sequence 267	AA582093
Sequence 216	AA418970	Sequence 268	AA583091
Sequence 217	AA420789	Sequence 269	AA584411
Sequence 218	AA421682	Sequence 270	AA586776
Sequence 219	AA421850	Sequence 271	AA587110
Sequence 220	AA424529	Sequence 272	AA587233
Sequence 221	AA428421	Sequence 273	AA587700
Sequence 222	AA429754	Sequence 274	AA609259
Sequence 223	AA441787	Sequence 275	AA609837
Sequence 224	AA451633	Sequence 276	AA613907
Sequence 225	AA453309	Sequence 277	AA614529
Sequence 226	AA453559	Sequence 278	AA618033
Sequence 227	AA453570	Sequence 279	AA628487
Sequence 228	AA454871	Sequence 280	AA631204
Sequence 229	AA454913	Sequence 281	AA631811
Sequence 230	AA456892	Sequence 282	AA640901
Sequence 231	AA457048	Sequence 283	AA641841
Sequence 232	AA463426	Sequence 284	AA642215
Sequence 233	AA465039	Sequence 285	AA643602
Sequence 234	AA477173	Sequence 286	AA651720
Sequence 235	AA480921	Sequence 287	AA664996
Sequence 236	AA484050	Sequence 288	AA668297
Sequence 237	AA484756	Sequence 289	AA668836
Sequence 238	AA487483	Sequence 290	AA675923
Sequence 239	AA489640	Sequence 291	AA687833
Sequence 240	AA493886	Sequence 292	AA704992
Sequence 241	AA494493	Sequence 293	AA732702
Sequence 242	AA496518	Sequence 294	AA745241
Sequence 243	AA501749	Sequence 295	AA746481
Sequence 244	AA501822	Sequence 296	AA758889
Sequence 245	AA501945	Sequence 297	AA772570
Sequence 246	AA504490	Sequence 298	AA772790
Sequence 247	AA507234	Sequence 299	AA776709
Sequence 248	AA513640	Sequence 300	AA776811
Sequence 249	AA526227	Sequence 301	AA777384
Sequence 250	AA526889	Sequence 302	AA778116
Sequence 251	AA527139	Sequence 303	AA779868
Sequence 252	AA527188	Sequence 304	AA781343
Sequence 253	AA531428	Sequence 305	AA809984
Sequence 254	AA532633	Sequence 306	AA810945
Sequence 255	AA535471	Sequence 307	AA811200
Sequence 256	AA554757	Sequence 308	AA825768
Sequence 257	AA565996	Sequence 309	AA828073

Table 1

Sequence 310	AA828722	Sequence 362	AF035316
Sequence 311	AA843176	Sequence 363	AF037204
Sequence 312	AA843661	Sequence 364	AF038451
Sequence 313	AA876526	Sequence 365	AF038662
Sequence 314	AA883255	Sequence 366	AF038963
Sequence 315	AA906652	Sequence 367	AF043431
Sequence 316	AA917638	Sequence 368	AF044956
Sequence 317	AA927734	Sequence 369	AF045941
Sequence 318	AA954939	Sequence 370	AF046997
Sequence 319	AA962622	Sequence 371	AF051894
Sequence 320	AA991285	Sequence 372	AF052124
Sequence 321	AB000115	Sequence 373	AF052578
Sequence 322	AB004047	Sequence 374	AF053233
Sequence 323	AB006746	Sequence 375	AF054838
Sequence 324	AB007619	Sequence 376	AF055012
Sequence 325	AB007860	Sequence 377	AF061736
Sequence 326	AB007965	Sequence 378	AF061738
Sequence 327	AB011101	Sequence 379	AF064603
Sequence 328	AB011169	Sequence 380	AF064854
Sequence 329	AB012701	Sequence 381	AF065388
Sequence 330	AB014536	Sequence 382	AF067168
Sequence 331	AB014565	Sequence 383	AF067174
Sequence 332	AB019568	Sequence 384	AF067817
Sequence 333	AB020623	Sequence 385	AF070523
Sequence 334	AB020629	Sequence 386	AF070561
Sequence 335	AB020693	Sequence 387	AF070562
Sequence 336	AB021288	Sequence 388	AF070596
Sequence 337	AB022663	Sequence 389	AF070664
Sequence 338	AB023214	Sequence 390	AF070674
Sequence 339	AB023230	Sequence 391	AF077048
Sequence 340	AC02059	Sequence 392	AF077051
Sequence 341	AC03653	Sequence 393	AF077200
Sequence 342	AC13415	Sequence 394	AF077671
Sequence 343	AF000982	Sequence 395	AF080246
Sequence 344	AF002985	Sequence 396	AF081484
Sequence 345	AF005654	Sequence 397	AF083470
Sequence 346	AF006086	Sequence 398	AF084523
Sequence 347	AF007791	Sequence 399	AF085355
Sequence 348	AF013758	Sequence 400	AF086003
Sequence 349	AF013988	Sequence 401	AF086080
Sequence 350	AF021232	Sequence 402	AF086183
Sequence 351	AF026939	Sequence 403	AF086545
Sequence 352	AF026941	Sequence 404	AF091263
Sequence 353	AF026942	Sequence 405	AF111713
Sequence 354	AF026943	Sequence 406	AF118023
Sequence 355	AF026944	Sequence 407	AF124438
Sequence 356	AF028832	Sequence 408	AF124439
Sequence 357	AF030455	Sequence 409	AF131808
Sequence 358	AF030514	Sequence 410	AF131820
Sequence 359	AF031469	Sequence 411	AF131848
Sequence 360	AF033095	Sequence 412	AF132966
Sequence 361	AF035286	Sequence 413	AF132968

Table 1

Sequence 414	AF146277	Sequence 466	AI382020
Sequence 415	AF147331	Sequence 467	AI400372
Sequence 416	AF150100	Sequence 468	AI417973
Sequence 417	AF150266	Sequence 469	AI431963
Sequence 418	AF151873	Sequence 470	AI453405
Sequence 419	AF151877	Sequence 471	AI457157
Sequence 420	AF151978	Sequence 472	AI457624
Sequence 421	AF167160	Sequence 473	AI459679
Sequence 422	AI023413	Sequence 474	AI460010
Sequence 423	AI027888	Sequence 475	AI469095
Sequence 424	AI031811	Sequence 476	AI469715
Sequence 425	AI033687	Sequence 477	AI471539
Sequence 426	AI042140	Sequence 478	AI476335
Sequence 427	AI075324	Sequence 479	AI479289
Sequence 428	AI075876	Sequence 480	AI499285
Sequence 429	AI126802	Sequence 481	AI521180
Sequence 430	AI127556	Sequence 482	AI538061
Sequence 431	AI129360	Sequence 483	AI567204
Sequence 432	AI139456	Sequence 484	AI587104
Sequence 433	AI140291	Sequence 485	AI587328
Sequence 434	AI144215	Sequence 486	AI609624
Sequence 435	AI161378	Sequence 487	AI610607
Sequence 436	AI188638	Sequence 488	AI612873
Sequence 437	AI215617	Sequence 489	AI627444
Sequence 438	AI216969	Sequence 490	AI632869
Sequence 439	AI241578	Sequence 491	AI633164
Sequence 440	AI250167	Sequence 492	AI636014
Sequence 441	AI253330	Sequence 493	AI637620
Sequence 442	AI253335	Sequence 494	AI676218
Sequence 443	AI253369	Sequence 495	AI683871
Sequence 444	AI253436	Sequence 496	AI684170
Sequence 445	AI261671	Sequence 497	AI693877
Sequence 446	AI262264	Sequence 498	AI694088
Sequence 447	AI267162	Sequence 499	AI732534
Sequence 448	AI267379	Sequence 500	AI743595
Sequence 449	AI267502	Sequence 501	AI744489
Sequence 450	AI267622	Sequence 502	AI745058
Sequence 451	AI279131	Sequence 503	AI753108
Sequence 452	AI285943	Sequence 504	AI791322
Sequence 453	AI289173	Sequence 505	AI798474
Sequence 454	AI290876	Sequence 506	AI803838
Sequence 455	AI292104	Sequence 507	AI811960
Sequence 456	AI300033	Sequence 508	AI813617
Sequence 457	AI300074	Sequence 509	AI815829
Sequence 458	AI312113	Sequence 510	AI826957
Sequence 459	AI336032	Sequence 511	AI831002
Sequence 460	AI337069	Sequence 512	AI863041
Sequence 461	AI340262	Sequence 513	AI867294
Sequence 462	AI346975	Sequence 514	AI912076
Sequence 463	AI354639	Sequence 515	AI915553
Sequence 464	AI366381	Sequence 516	AJ001381
Sequence 465	AI369024	Sequence 517	AJ003401

Table 1

Sequence 518	AJ010071	Sequence 570	D90311
Sequence 519	AJ132502	Sequence 571	D90453
Sequence 520	AL044356	Sequence 572	E01197
Sequence 521	AL044825	Sequence 573	E01198
Sequence 522	AL047024	Sequence 574	E01630
Sequence 523	AL048393	Sequence 575	E01954
Sequence 524	AL049313	Sequence 576	E01971
Sequence 525	AL049923	Sequence 577	E01972
Sequence 526	AL049954	Sequence 578	E02628
Sequence 527	AL050024	Sequence 579	E03569
Sequence 528	AL050272	Sequence 580	E03879
Sequence 529	AL050395	Sequence 581	E08663
Sequence 530	AL096714	Sequence 582	F06593
Sequence 531	AL096748	Sequence 583	F28779
Sequence 532	AL096842	Sequence 584	H25806
Sequence 533	AL110124	Sequence 585	H47546
Sequence 534	C17346	Sequence 586	H48873
Sequence 535	D00017	Sequence 587	H66467
Sequence 536	D00068	Sequence 588	H88415
Sequence 537	D11960	Sequence 589	J00196
Sequence 538	D12502	Sequence 590	J03575
Sequence 539	D12763	Sequence 591	J03858
Sequence 540	D13380	Sequence 592	J03909
Sequence 541	D13645	Sequence 593	J04164
Sequence 542	D13866	Sequence 594	K00422
Sequence 543	D14697	Sequence 595	K01763
Sequence 544	D21260	Sequence 596	L00693
Sequence 545	D23660	Sequence 597	L02426
Sequence 546	D26155	Sequence 598	L06328
Sequence 547	D26599	Sequence 599	L09159
Sequence 548	D28759	Sequence 600	L10413
Sequence 549	D29640	Sequence 601	L11066
Sequence 550	D31763	Sequence 602	L20688
Sequence 551	D31767	Sequence 603	L20941
Sequence 552	D31883	Sequence 604	L28997
Sequence 553	D38524	Sequence 605	L38995
Sequence 554	D42040	Sequence 606	L41490
Sequence 555	D45248	Sequence 607	M10119
Sequence 556	D49396	Sequence 608	M13536
Sequence 557	D50372	Sequence 609	M14328
Sequence 558	D50420	Sequence 610	M14764
Sequence 559	D55653	Sequence 611	M15329
Sequence 560	D81522	Sequence 612	M16660
Sequence 561	D83077	Sequence 613	M17017
Sequence 562	D83767	Sequence 614	M18216
Sequence 563	D86958	Sequence 615	M19723
Sequence 564	D86979	Sequence 616	M22918
Sequence 565	D87666	Sequence 617	M23613
Sequence 566	D87667	Sequence 618	M24194
Sequence 567	D87735	Sequence 619	M24594
Sequence 568	D88532	Sequence 620	M26152
Sequence 569	D89053	Sequence 621	M29540

Table 1

Sequence 622	M29541	Sequence 674	U03886
Sequence 623	M29551	Sequence 675	U04313
Sequence 624	M33146	Sequence 676	U07550
Sequence 625	M34064	Sequence 677	U07857
Sequence 626	M34455	Sequence 678	U08815
Sequence 627	M35198	Sequence 679	U09559
Sequence 628	M36693	Sequence 680	U09847
Sequence 629	M37716	Sequence 681	U10439
Sequence 630	M55268	Sequence 682	U14966
Sequence 631	M55542	Sequence 683	U18321
Sequence 632	M55543	Sequence 684	U19878
Sequence 633	M57567	Sequence 685	U23942
Sequence 634	M60333	Sequence 686	U25789
Sequence 635	M61715	Sequence 687	U28249
Sequence 636	M62831	Sequence 688	U28964
Sequence 637	M63121	Sequence 689	U32500
Sequence 638	M63838	Sequence 690	U32944
Sequence 639	M68520	Sequence 691	U33760
Sequence 640	M77945	Sequence 692	U37230
Sequence 641	M80563	Sequence 693	U37518
Sequence 642	M81757	Sequence 694	U38292
Sequence 643	M83248	Sequence 695	U38784
Sequence 644	M83654	Sequence 696	U41371
Sequence 645	M86553	Sequence 697	U41515
Sequence 646	M87284	Sequence 698	U52513
Sequence 647	M87434	Sequence 699	U56255
Sequence 648	M87503	Sequence 700	U57847
Sequence 649	M92357	Sequence 701	U61083
Sequence 650	M96982	Sequence 702	U68758
Sequence 651	M97501	Sequence 703	U73524
Sequence 652	M97935	Sequence 704	U77085
Sequence 653	N36346	Sequence 705	U78722
Sequence 654	N51262	Sequence 706	U79751
Sequence 655	N57413	Sequence 707	U94586
Sequence 656	N78477	Sequence 708	V00572
Sequence 657	N92060	Sequence 709	V00594
Sequence 658	Q21065	Sequence 710	V04202
Sequence 659	Q94780	Sequence 711	V17906
Sequence 660	R13925	Sequence 712	V36078
Sequence 661	R51732	Sequence 713	V68140
Sequence 662	R56461	Sequence 714	V86134
Sequence 663	R66489	Sequence 715	W02908
Sequence 664	R75621	Sequence 716	W05711
Sequence 665	S45630	Sequence 717	W07308
Sequence 666	S70290	Sequence 718	W25547
Sequence 667	S75295	Sequence 719	W28837
Sequence 668	S76638	Sequence 720	W37272
Sequence 669	T34641	Sequence 721	W38644
Sequence 670	T50925	Sequence 722	W39262
Sequence 671	T52715	Sequence 723	W39498
Sequence 672	T54951	Sequence 724	W52254
Sequence 673	T70793	Sequence 725	W74319

Table 1

Sequence 726	W77987	Sequence 778	AA022965
Sequence 727	W80480	Sequence 779	AA024522
Sequence 728	X00637	Sequence 780	AA028164
Sequence 729	X01742	Sequence 781	AA035775
Sequence 730	X02530	Sequence 782	AA037294
Sequence 731	X02661	Sequence 783	AA039967
Sequence 732	X04316	Sequence 784	AA045637
Sequence 733	X04371	Sequence 785	AA046815
Sequence 734	X04470	Sequence 786	AA046853
Sequence 735	X05908	Sequence 787	AA047052
Sequence 736	X07819	Sequence 788	AA047213
Sequence 737	X13238	Sequence 789	AA057071
Sequence 738	X15674	Sequence 790	AA058933
Sequence 739	X15729	Sequence 791	AA064952
Sequence 740	X16354	Sequence 792	AA075089
Sequence 741	X16356	Sequence 793	AA076291
Sequence 742	X16455	Sequence 794	AA078508
Sequence 743	X17025	Sequence 795	AA080864
Sequence 744	X20432	Sequence 796	AA083345
Sequence 745	X30167	Sequence 797	AA083693
Sequence 746	X33937	Sequence 798	AA085497
Sequence 747	X35726	Sequence 799	AA086463
Sequence 748	X41105	Sequence 800	AA093935
Sequence 749	X51841	Sequence 801	AA100291
Sequence 750	X54941	Sequence 802	AA101207
Sequence 751	X56932	Sequence 803	AA102403
Sequence 752	X57351	Sequence 804	AA111856
Sequence 753	X59710	Sequence 805	AA115174
Sequence 754	X65614	Sequence 806	AA122134
Sequence 755	X67951	Sequence 807	AA122291
Sequence 756	X68060	Sequence 808	AA125780
Sequence 757	X68277	Sequence 809	AA127322
Sequence 758	X72790	Sequence 810	AA130432
Sequence 759	X76488	Sequence 811	AA131801
Sequence 760	X83544	Sequence 812	AA132445
Sequence 761	X85134	Sequence 813	AA134109
Sequence 762	X87949	Sequence 814	AA135924
Sequence 763	X93036	Sequence 815	AA136322
Sequence 764	X99699	Sequence 816	AA143034
Sequence 765	X99920	Sequence 817	AA150057
Sequence 766	Y09267	Sequence 818	AA151651
Sequence 767	Y13323	Sequence 819	AA156335
Sequence 768	Y17392	Sequence 820	AA157333
Sequence 769	Z12830	Sequence 821	AA158987
Sequence 770	Z36815	Sequence 822	AA165439
Sequence 771	Z47087	Sequence 823	AA165632
Sequence 772	Z48570	Sequence 824	AA166618
Sequence 773	Z71389	Sequence 825	AA172067
Sequence 774	AA002223	Sequence 826	AA173031
Sequence 775	AA018843	Sequence 827	AA178870
Sequence 776	AA021647	Sequence 828	AA181874
Sequence 777	AA022842	Sequence 829	AA195194

Table 1

Sequence 830	AA203206	Sequence 882	AA446099
Sequence 831	AA203289	Sequence 883	AA446403
Sequence 832	AA204768	Sequence 884	AA447735
Sequence 833	AA206621	Sequence 885	AA449054
Sequence 834	AA213914	Sequence 886	AA449205
Sequence 835	AA218919	Sequence 887	AA449520
Sequence 836	AA224050	Sequence 888	AA452273
Sequence 837	AA224244	Sequence 889	AA455007
Sequence 838	AA227596	Sequence 890	AA455104
Sequence 839	AA229018	Sequence 891	AA459527
Sequence 840	AA229161	Sequence 892	AA460226
Sequence 841	AA236445	Sequence 893	AA461287
Sequence 842	AA236680	Sequence 894	AA464526
Sequence 843	AA243537	Sequence 895	AA468398
Sequence 844	AA252436	Sequence 896	AA469135
Sequence 845	AA252869	Sequence 897	AA469453
Sequence 846	AA256330	Sequence 898	AA470690
Sequence 847	AA262700	Sequence 899	AA479427
Sequence 848	AA278358	Sequence 900	AA480336
Sequence 849	AA287076	Sequence 901	AA483454
Sequence 850	AA291551	Sequence 902	AA487669
Sequence 851	AA293273	Sequence 903	AA488423
Sequence 852	AA295982	Sequence 904	AA488635
Sequence 853	AA301675	Sequence 905	AA488843
Sequence 854	AA301722	Sequence 906	AA489772
Sequence 855	AA302964	Sequence 907	AA503972
Sequence 856	AA303199	Sequence 908	AA508506
Sequence 857	AA304927	Sequence 909	AA513550
Sequence 858	AA305042	Sequence 910	AA513783
Sequence 859	AA305635	Sequence 911	AA514989
Sequence 860	AA315030	Sequence 912	AA516400
Sequence 861	AA315943	Sequence 913	AA520993
Sequence 862	AA317144	Sequence 914	AA521110
Sequence 863	AA326060	Sequence 915	AA523639
Sequence 864	AA327358	Sequence 916	AA523697
Sequence 865	AA336387	Sequence 917	AA528106
Sequence 866	AA346413	Sequence 918	AA528190
Sequence 867	AA352580	Sequence 919	AA528226
Sequence 868	AA363162	Sequence 920	AA534830
Sequence 869	AA375754	Sequence 921	AA548722
Sequence 870	AA399230	Sequence 922	AA551236
Sequence 871	AA400249	Sequence 923	AA551243
Sequence 872	AA401629	Sequence 924	AA558778
Sequence 873	AA402885	Sequence 925	AA563834
Sequence 874	AA406401	Sequence 926	AA576432
Sequence 875	AA421682	Sequence 927	AA580069
Sequence 876	AA422057	Sequence 928	AA580294
Sequence 877	AA424445	Sequence 929	AA582588
Sequence 878	AA424901	Sequence 930	AA584304
Sequence 879	AA424984	Sequence 931	AA588772
Sequence 880	AA425182	Sequence 932	AA593075
Sequence 881	AA428607	Sequence 933	AA595585

Table 1

Sequence 934	AA601895	Sequence 986	AA897461
Sequence 935	AA628700	Sequence 987	AA902582
Sequence 936	AA630326	Sequence 988	AA902644
Sequence 937	AA630642	Sequence 989	AA909144
Sequence 938	AA631178	Sequence 990	AA913281
Sequence 939	AA631218	Sequence 991	AA916756
Sequence 940	AA633550	Sequence 992	AA922420
Sequence 941	AA634808	Sequence 993	AA927283
Sequence 942	AA639199	Sequence 994	AA933075
Sequence 943	AA639791	Sequence 995	AA935979
Sequence 944	AA644273	Sequence 996	AA937947
Sequence 945	AA648897	Sequence 997	AA948295
Sequence 946	AA664732	Sequence 998	AA969131
Sequence 947	AA677550	Sequence 999	AA971881
Sequence 948	AA687308	Sequence 1000	AA973019
Sequence 949	AA705002	Sequence 1001	AA988923
Sequence 950	AA706685	Sequence 1002	AA989465
Sequence 951	AA708266	Sequence 1003	AA994023
Sequence 952	AA713687	Sequence 1004	AB002310
Sequence 953	AA719618	Sequence 1005	AB002330
Sequence 954	AA719674	Sequence 1006	AB007944
Sequence 955	AA720572	Sequence 1007	AB012911
Sequence 956	AA721752	Sequence 1008	AB017019
Sequence 957	AA723612	Sequence 1009	AB018266
Sequence 958	AA730571	Sequence 1010	AB018305
Sequence 959	AA742282	Sequence 1011	AB018347
Sequence 960	AA748437	Sequence 1012	AB019568
Sequence 961	AA749187	Sequence 1013	AB023158
Sequence 962	AA761602	Sequence 1014	AB028976
Sequence 963	AA768355	Sequence 1015	AB029005
Sequence 964	AA769127	Sequence 1016	AC28164
Sequence 965	AA774030	Sequence 1017	AD001528
Sequence 966	AA774247	Sequence 1018	AF000231
Sequence 967	AA779631	Sequence 1019	AF006088
Sequence 968	AA808747	Sequence 1020	AF006516
Sequence 969	AA809854	Sequence 1021	AF012072
Sequence 970	AA810859	Sequence 1022	AF026947
Sequence 971	AA825673	Sequence 1023	AF028832
Sequence 972	AA825768	Sequence 1024	AF030424
Sequence 973	AA826517	Sequence 1025	AF031379
Sequence 974	AA827331	Sequence 1026	AF035287
Sequence 975	AA827764	Sequence 1027	AF035309
Sequence 976	AA829511	Sequence 1028	AF038197
Sequence 977	AA831603	Sequence 1029	AF038404
Sequence 978	AA836991	Sequence 1030	AF043431
Sequence 979	AA837254	Sequence 1031	AF044670
Sequence 980	AA846480	Sequence 1032	AF044958
Sequence 981	AA846840	Sequence 1033	AF047184
Sequence 982	AA853515	Sequence 1034	AF052164
Sequence 983	AA883212	Sequence 1035	AF052496
Sequence 984	AA886885	Sequence 1036	AF052578
Sequence 985	AA889485	Sequence 1037	AF054990

Table 1

Sequence 1038	AF059524	Sequence 1090	AI338977
Sequence 1039	AF070561	Sequence 1091	AI339946
Sequence 1040	AF070626	Sequence 1092	AI373032
Sequence 1041	AF070655	Sequence 1093	AI374954
Sequence 1042	AF070674	Sequence 1094	AI380539
Sequence 1043	AF075040	Sequence 1095	AI417583
Sequence 1044	AF077030	Sequence 1096	AI432644
Sequence 1045	AF078847	Sequence 1097	AI433157
Sequence 1046	AF080246	Sequence 1098	AI457792
Sequence 1047	AF081282	Sequence 1099	AI469112
Sequence 1048	AF081484	Sequence 1100	AI471114
Sequence 1049	AF084523	Sequence 1101	AI471534
Sequence 1050	AF086163	Sequence 1102	AI473927
Sequence 1051	AF095791	Sequence 1103	AI479305
Sequence 1052	AF100756	Sequence 1104	AI499243
Sequence 1053	AF107406	Sequence 1105	AI525796
Sequence 1054	AF119297	Sequence 1106	AI525843
Sequence 1055	AF131858	Sequence 1107	AI537677
Sequence 1056	AF132940	Sequence 1108	AI541029
Sequence 1057	AF151857	Sequence 1109	AI560129
Sequence 1058	AI028733	Sequence 1110	AI583108
Sequence 1059	AI031901	Sequence 1111	AI584068
Sequence 1060	AI033739	Sequence 1112	AI587208
Sequence 1061	AI040324	Sequence 1113	AI589867
Sequence 1062	AI051172	Sequence 1114	AI610676
Sequence 1063	AI076805	Sequence 1115	AI630362
Sequence 1064	AI087005	Sequence 1116	AI633006
Sequence 1065	AI089913	Sequence 1117	AI634443
Sequence 1066	AI092007	Sequence 1118	AI635096
Sequence 1067	AI127326	Sequence 1119	AI682105
Sequence 1068	AI147251	Sequence 1120	AI683338
Sequence 1069	AI148933	Sequence 1121	AI684800
Sequence 1070	AI149846	Sequence 1122	AI684991
Sequence 1071	AI167855	Sequence 1123	AI689369
Sequence 1072	AI183965	Sequence 1124	AI689617
Sequence 1073	AI189258	Sequence 1125	AI689883
Sequence 1074	AI220148	Sequence 1126	AI693745
Sequence 1075	AI224374	Sequence 1127	AI701001
Sequence 1076	AI240095	Sequence 1128	AI733038
Sequence 1077	AI246677	Sequence 1129	AI735638
Sequence 1078	AI248538	Sequence 1130	AI741506
Sequence 1079	AI266582	Sequence 1131	AI742722
Sequence 1080	AI268864	Sequence 1132	AI742738
Sequence 1081	AI270183	Sequence 1133	AI743552
Sequence 1082	AI271795	Sequence 1134	AI753784
Sequence 1083	AI273008	Sequence 1135	AI754296
Sequence 1084	AI273841	Sequence 1136	AI754652
Sequence 1085	AI274756	Sequence 1137	AI754732
Sequence 1086	AI275528	Sequence 1138	AI765975
Sequence 1087	AI283096	Sequence 1139	AI769970
Sequence 1088	AI298059	Sequence 1140	AI819225
Sequence 1089	AI335653	Sequence 1141	AI820563

Table 1

Sequence 1142	AI827818	Sequence 1194	D30655
Sequence 1143	AI828682	Sequence 1195	D50310
Sequence 1144	AI830067	Sequence 1196	D51497
Sequence 1145	AI861989	Sequence 1197	D53031
Sequence 1146	AI887129	Sequence 1198	D62116
Sequence 1147	AI887632	Sequence 1199	D63878
Sequence 1148	AI890281	Sequence 1200	D78611
Sequence 1149	AI924046	Sequence 1201	D82348
Sequence 1150	AI924096	Sequence 1202	D83032
Sequence 1151	AI924823	Sequence 1203	D85433
Sequence 1152	AI963471	Sequence 1204	D87437
Sequence 1153	AI963604	Sequence 1205	D87667
Sequence 1154	AI972556	Sequence 1206	D89092
Sequence 1155	AI979048	Sequence 1207	D90041
Sequence 1156	AI984656	Sequence 1208	E02628
Sequence 1157	AJ010442	Sequence 1209	E05732
Sequence 1158	AJ132694	Sequence 1210	F00551
Sequence 1159	AJ224442	Sequence 1211	H08920
Sequence 1160	AL036299	Sequence 1212	H25080
Sequence 1161	AL042979	Sequence 1213	H30306
Sequence 1162	AL047305	Sequence 1214	H44647
Sequence 1163	AL049247	Sequence 1215	H81376
Sequence 1164	AL049313	Sequence 1216	H93521
Sequence 1165	AL049381	Sequence 1217	H94496
Sequence 1166	AL049932	Sequence 1218	J03464
Sequence 1167	AL050041	Sequence 1219	J03799
Sequence 1168	AL050161	Sequence 1220	J04027
Sequence 1169	AL050265	Sequence 1221	J04177
Sequence 1170	AL050268	Sequence 1222	K01228
Sequence 1171	AL050367	Sequence 1223	K01566
Sequence 1172	AL079286	Sequence 1224	L07395
Sequence 1173	AL079312	Sequence 1225	L09159
Sequence 1174	AL079314	Sequence 1226	L11315
Sequence 1175	AL080113	Sequence 1227	L13806
Sequence 1176	AL110164	Sequence 1228	L15702
Sequence 1177	AL117412	Sequence 1229	L16510
Sequence 1178	AL117612	Sequence 1230	L24804
Sequence 1179	AL119009	Sequence 1231	L25931
Sequence 1180	AW014693	Sequence 1232	L28809
Sequence 1181	AW014985	Sequence 1233	M10036
Sequence 1182	AW021794	Sequence 1234	M10905
Sequence 1183	C01521	Sequence 1235	M11353
Sequence 1184	D01096	Sequence 1236	M12267
Sequence 1185	D13119	Sequence 1237	M13536
Sequence 1186	D13627	Sequence 1238	M14483
Sequence 1187	D13630	Sequence 1239	M14630
Sequence 1188	D13639	Sequence 1240	M17885
Sequence 1189	D13665	Sequence 1241	M18366
Sequence 1190	D14530	Sequence 1242	M21575
Sequence 1191	D21260	Sequence 1243	M23254
Sequence 1192	D25278	Sequence 1244	M24194
Sequence 1193	D26361	Sequence 1245	M24486

Table 1

Sequence 1246	M26512	Sequence 1298	V24305
Sequence 1247	M28372	Sequence 1299	V81394
Sequence 1248	M31159	Sequence 1300	V84510
Sequence 1249	M32220	Sequence 1301	W19427
Sequence 1250	M36341	Sequence 1302	W65357
Sequence 1251	M36693	Sequence 1303	W75963
Sequence 1252	M38690	Sequence 1304	W80525
Sequence 1253	M58485	Sequence 1305	X01630
Sequence 1254	M59849	Sequence 1306	X04098
Sequence 1255	M62831	Sequence 1307	X04408
Sequence 1256	M64241	Sequence 1308	X06700
Sequence 1257	M69043	Sequence 1309	X14420
Sequence 1258	M77142	Sequence 1310	X51742
Sequence 1259	M77830	Sequence 1311	X60111
Sequence 1260	M86667	Sequence 1312	X69398
Sequence 1261	M88108	Sequence 1313	X72755
Sequence 1262	M93651	Sequence 1314	X74979
Sequence 1263	M95542	Sequence 1315	X76180
Sequence 1264	N43970	Sequence 1316	X78627
Sequence 1265	Q12759	Sequence 1317	X79067
Sequence 1266	Q14635	Sequence 1318	X80910
Sequence 1267	R11045	Sequence 1319	X87949
Sequence 1268	R76376	Sequence 1320	Y00052
Sequence 1269	R84450	Sequence 1321	Y00062
Sequence 1270	S74728	Sequence 1322	Y00282
Sequence 1271	S82081	Sequence 1323	Y00503
Sequence 1272	T07459	Sequence 1324	Y15286
Sequence 1273	T19883	Sequence 1325	Y17171
Sequence 1274	T21168	Sequence 1326	Z13009
Sequence 1275	T22605	Sequence 1327	Z24724
Sequence 1276	T37405	Sequence 1328	Z29083
Sequence 1277	T67129	Sequence 1329	Z29331
Sequence 1278	T69703	Sequence 1330	Z46606
Sequence 1279	T78615	Sequence 1331	Z48501
Sequence 1280	T89937	Sequence 1332	AA001460
Sequence 1281	U03851	Sequence 1333	AA001543
Sequence 1282	U12404	Sequence 1334	AA001792
Sequence 1283	U14967	Sequence 1335	AA004925
Sequence 1284	U14971	Sequence 1336	AA010897
Sequence 1285	U20659	Sequence 1337	AA017162
Sequence 1286	U25789	Sequence 1338	AA019019
Sequence 1287	U30825	Sequence 1339	AA022980
Sequence 1288	U47077	Sequence 1340	AA024595
Sequence 1289	U49844	Sequence 1341	AA024940
Sequence 1290	U63846	Sequence 1342	AA024996
Sequence 1291	U65928	Sequence 1343	AA025750
Sequence 1292	U72516	Sequence 1344	AA026598
Sequence 1293	U79282	Sequence 1345	AA029271
Sequence 1294	U90716	Sequence 1346	AA029725
Sequence 1295	U90904	Sequence 1347	AA029930
Sequence 1296	U94364	Sequence 1348	AA033832
Sequence 1297	V20437	Sequence 1349	AA035471

Table 1

Sequence 1350	AA035616	Sequence 1402	AA088344
Sequence 1351	AA036752	Sequence 1403	AA088351
Sequence 1352	AA037377	Sequence 1404	AA088693
Sequence 1353	AA039778	Sequence 1405	AA088783
Sequence 1354	AA039948	Sequence 1406	AA088829
Sequence 1355	AA040688	Sequence 1407	AA090106
Sequence 1356	AA040820	Sequence 1408	AA096032
Sequence 1357	AA041259	Sequence 1409	AA099819
Sequence 1358	AA043477	Sequence 1410	AA099923
Sequence 1359	AA044209	Sequence 1411	AA099976
Sequence 1360	AA044233	Sequence 1412	AA100764
Sequence 1361	AA044791	Sequence 1413	AA101010
Sequence 1362	AA045054	Sequence 1414	AA102013
Sequence 1363	AA045147	Sequence 1415	AA102564
Sequence 1364	AA045768	Sequence 1416	AA102830
Sequence 1365	AA046848	Sequence 1417	AA112186
Sequence 1366	AA053021	Sequence 1418	AA112645
Sequence 1367	AA053316	Sequence 1419	AA113305
Sequence 1368	AA053919	Sequence 1420	AA115218
Sequence 1369	AA054069	Sequence 1421	AA115315
Sequence 1370	AA055479	Sequence 1422	AA121656
Sequence 1371	AA055591	Sequence 1423	AA121718
Sequence 1372	AA055637	Sequence 1424	AA125809
Sequence 1373	AA057243	Sequence 1425	AA125939
Sequence 1374	AA058712	Sequence 1426	AA126452
Sequence 1375	AA059128	Sequence 1427	AA126718
Sequence 1376	AA065169	Sequence 1428	AA127436
Sequence 1377	AA069850	Sequence 1429	AA127666
Sequence 1378	AA071167	Sequence 1430	AA128063
Sequence 1379	AA075158	Sequence 1431	AA128636
Sequence 1380	AA075515	Sequence 1432	AA128641
Sequence 1381	AA075663	Sequence 1433	AA130778
Sequence 1382	AA076397	Sequence 1434	AA130982
Sequence 1383	AA076421	Sequence 1435	AA131827
Sequence 1384	AA078387	Sequence 1436	AA132056
Sequence 1385	AA078570	Sequence 1437	AA132163
Sequence 1386	AA078872	Sequence 1438	AA132574
Sequence 1387	AA079480	Sequence 1439	AA132992
Sequence 1388	AA080889	Sequence 1440	AA133351
Sequence 1389	AA081073	Sequence 1441	AA133474
Sequence 1390	AA081608	Sequence 1442	AA134460
Sequence 1391	AA081834	Sequence 1443	AA134527
Sequence 1392	AA081917	Sequence 1444	AA134589
Sequence 1393	AA082258	Sequence 1445	AA135696
Sequence 1394	AA082441	Sequence 1446	AA137017
Sequence 1395	AA083270	Sequence 1447	AA142941
Sequence 1396	AA083345	Sequence 1448	AA143001
Sequence 1397	AA083522	Sequence 1449	AA143074
Sequence 1398	AA083573	Sequence 1450	AA143746
Sequence 1399	AA083638	Sequence 1451	AA146900
Sequence 1400	AA083774	Sequence 1452	AA147200
Sequence 1401	AA088318	Sequence 1453	AA147247

Table 1

Sequence 1454	AA147781	Sequence 1506	AA188826
Sequence 1455	AA148027	Sequence 1507	AA190873
Sequence 1456	AA148136	Sequence 1508	AA191422
Sequence 1457	AA149810	Sequence 1509	AA192094
Sequence 1458	AA150377	Sequence 1510	AA193308
Sequence 1459	AA150837	Sequence 1511	AA194577
Sequence 1460	AA150928	Sequence 1512	AA195246
Sequence 1461	AA151274	Sequence 1513	AA195865
Sequence 1462	AA151594	Sequence 1514	AA196424
Sequence 1463	AA151755	Sequence 1515	AA196982
Sequence 1464	AA152476	Sequence 1516	AA203691
Sequence 1465	AA155754	Sequence 1517	AA204867
Sequence 1466	AA156066	Sequence 1518	AA206578
Sequence 1467	AA157163	Sequence 1519	AA206991
Sequence 1468	AA157993	Sequence 1520	AA209508
Sequence 1469	AA158738	Sequence 1521	AA216753
Sequence 1470	AA159110	Sequence 1522	AA219665
Sequence 1471	AA159576	Sequence 1523	AA223121
Sequence 1472	AA161003	Sequence 1524	AA223820
Sequence 1473	AA161076	Sequence 1525	AA224109
Sequence 1474	AA161467	Sequence 1526	AA224407
Sequence 1475	AA164193	Sequence 1527	AA227118
Sequence 1476	AA164473	Sequence 1528	AA229325
Sequence 1477	AA164729	Sequence 1529	AA229611
Sequence 1478	AA164873	Sequence 1530	AA232959
Sequence 1479	AA165027	Sequence 1531	AA233835
Sequence 1480	AA165068	Sequence 1532	AA233843
Sequence 1481	AA165087	Sequence 1533	AA234092
Sequence 1482	AA165174	Sequence 1534	AA234307
Sequence 1483	AA165282	Sequence 1535	AA236776
Sequence 1484	AA165293	Sequence 1536	AA242985
Sequence 1485	AA165638	Sequence 1537	AA243338
Sequence 1486	AA166618	Sequence 1538	AA244342
Sequence 1487	AA167041	Sequence 1539	AA249154
Sequence 1488	AA167750	Sequence 1540	AA255502
Sequence 1489	AA171630	Sequence 1541	AA256591
Sequence 1490	AA173506	Sequence 1542	AA261990
Sequence 1491	AA174097	Sequence 1543	AA262939
Sequence 1492	AA179187	Sequence 1544	AA278445
Sequence 1493	AA180137	Sequence 1545	AA278482
Sequence 1494	AA180224	Sequence 1546	AA278642
Sequence 1495	AA180383	Sequence 1547	AA278956
Sequence 1496	AA181075	Sequence 1548	AA279048
Sequence 1497	AA181258	Sequence 1549	AA280099
Sequence 1498	AA181684	Sequence 1550	AA280221
Sequence 1499	AA182415	Sequence 1551	AA280828
Sequence 1500	AA182540	Sequence 1552	AA282915
Sequence 1501	AA186577	Sequence 1553	AA284334
Sequence 1502	AA187817	Sequence 1554	AA284555
Sequence 1503	AA188045	Sequence 1555	AA284670
Sequence 1504	AA188140	Sequence 1556	AA284671
Sequence 1505	AA188384	Sequence 1557	AA284870

Table 1

Sequence 1558	AA284906	Sequence 1610	AA314872
Sequence 1559	AA285290	Sequence 1611	AA315363
Sequence 1560	AA286699	Sequence 1612	AA315379
Sequence 1561	AA286872	Sequence 1613	AA317243
Sequence 1562	AA287219	Sequence 1614	AA317393
Sequence 1563	AA287642	Sequence 1615	AA318969
Sequence 1564	AA287815	Sequence 1616	AA327201
Sequence 1565	AA291438	Sequence 1617	AA331991
Sequence 1566	AA291485	Sequence 1618	AA332672
Sequence 1567	AA291971	Sequence 1619	AA333358
Sequence 1568	AA292334	Sequence 1620	AA335273
Sequence 1569	AA293127	Sequence 1621	AA336666
Sequence 1570	AA293133	Sequence 1622	AA337192
Sequence 1571	AA293273	Sequence 1623	AA337489
Sequence 1572	AA293286	Sequence 1624	AA338793
Sequence 1573	AA293353	Sequence 1625	AA339957
Sequence 1574	AA293572	Sequence 1626	AA340341
Sequence 1575	AA293629	Sequence 1627	AA341446
Sequence 1576	AA293759	Sequence 1628	AA341465
Sequence 1577	AA293804	Sequence 1629	AA342969
Sequence 1578	AA296780	Sequence 1630	AA343629
Sequence 1579	AA297402	Sequence 1631	AA344084
Sequence 1580	AA298505	Sequence 1632	AA345329
Sequence 1581	AA299640	Sequence 1633	AA346393
Sequence 1582	AA301062	Sequence 1634	AA346698
Sequence 1583	AA301800	Sequence 1635	AA347887
Sequence 1584	AA303461	Sequence 1636	AA350059
Sequence 1585	AA303568	Sequence 1637	AA351507
Sequence 1586	AA306718	Sequence 1638	AA355003
Sequence 1587	AA306862	Sequence 1639	AA356682
Sequence 1588	AA306876	Sequence 1640	AA357574
Sequence 1589	AA307198	Sequence 1641	AA358887
Sequence 1590	AA307325	Sequence 1642	AA359705
Sequence 1591	AA308065	Sequence 1643	AA364352
Sequence 1592	AA308274	Sequence 1644	AA367451
Sequence 1593	AA308744	Sequence 1645	AA367773
Sequence 1594	AA310739	Sequence 1646	AA368542
Sequence 1595	AA310771	Sequence 1647	AA369400
Sequence 1596	AA311228	Sequence 1648	AA373230
Sequence 1597	AA311460	Sequence 1649	AA374754
Sequence 1598	AA311571	Sequence 1650	AA375312
Sequence 1599	AA311801	Sequence 1651	AA375815
Sequence 1600	AA311848	Sequence 1652	AA393525
Sequence 1601	AA311905	Sequence 1653	AA394115
Sequence 1602	AA312218	Sequence 1654	AA398443
Sequence 1603	AA312240	Sequence 1655	AA398585
Sequence 1604	AA312435	Sequence 1656	AA398739
Sequence 1605	AA313108	Sequence 1657	AA399165
Sequence 1606	AA313223	Sequence 1658	AA399628
Sequence 1607	AA313653	Sequence 1659	AA401329
Sequence 1608	AA313994	Sequence 1660	AA401334
Sequence 1609	AA314431	Sequence 1661	AA402191

Table 1

Sequence 1662	AA402289	Sequence 1714	AA476522
Sequence 1663	AA402775	Sequence 1715	AA477018
Sequence 1664	AA403319	Sequence 1716	AA477567
Sequence 1665	AA404613	Sequence 1717	AA477973
Sequence 1666	AA405124	Sequence 1718	AA478230
Sequence 1667	AA406239	Sequence 1719	AA479646
Sequence 1668	AA410580	Sequence 1720	AA479648
Sequence 1669	AA410982	Sequence 1721	AA479848
Sequence 1670	AA411021	Sequence 1722	AA481078
Sequence 1671	AA411252	Sequence 1723	AA481710
Sequence 1672	AA411764	Sequence 1724	AA482430
Sequence 1673	AA417794	Sequence 1725	AA482432
Sequence 1674	AA419263	Sequence 1726	AA482779
Sequence 1675	AA419284	Sequence 1727	AA483258
Sequence 1676	AA420751	Sequence 1728	AA483726
Sequence 1677	AA420758	Sequence 1729	AA483858
Sequence 1678	AA421248	Sequence 1730	AA484181
Sequence 1679	AA421682	Sequence 1731	AA486047
Sequence 1680	AA422060	Sequence 1732	AA486859
Sequence 1681	AA422143	Sequence 1733	AA488141
Sequence 1682	AA425004	Sequence 1734	AA488385
Sequence 1683	AA425468	Sequence 1735	AA488517
Sequence 1684	AA425737	Sequence 1736	AA489323
Sequence 1685	AA429794	Sequence 1737	AA489380
Sequence 1686	AA430400	Sequence 1738	AA489382
Sequence 1687	AA430436	Sequence 1739	AA491204
Sequence 1688	AA431428	Sequence 1740	AA492143
Sequence 1689	AA433988	Sequence 1741	AA493371
Sequence 1690	AA436315	Sequence 1742	AA494321
Sequence 1691	AA436411	Sequence 1743	AA494552
Sequence 1692	AA443024	Sequence 1744	AA501657
Sequence 1693	AA449394	Sequence 1745	AA502136
Sequence 1694	AA451779	Sequence 1746	AA505780
Sequence 1695	AA453878	Sequence 1747	AA512933
Sequence 1696	AA454668	Sequence 1748	AA514395
Sequence 1697	AA454953	Sequence 1749	AA514974
Sequence 1698	AA454962	Sequence 1750	AA515143
Sequence 1699	AA455245	Sequence 1751	AA516376
Sequence 1700	AA455785	Sequence 1752	AA521006
Sequence 1701	AA456454	Sequence 1753	AA523522
Sequence 1702	AA456557	Sequence 1754	AA524748
Sequence 1703	AA457255	Sequence 1755	AA524950
Sequence 1704	AA457579	Sequence 1756	AA525141
Sequence 1705	AA459167	Sequence 1757	AA526028
Sequence 1706	AA459210	Sequence 1758	AA527275
Sequence 1707	AA459527	Sequence 1759	AA527557
Sequence 1708	AA460570	Sequence 1760	AA533506
Sequence 1709	AA460816	Sequence 1761	AA534349
Sequence 1710	AA461005	Sequence 1762	AA534586
Sequence 1711	AA468657	Sequence 1763	AA534608
Sequence 1712	AA469447	Sequence 1764	AA535496
Sequence 1713	AA469453	Sequence 1765	AA541651

Table 1

Sequence 1766	AA548056	Sequence 1818	AA628536
Sequence 1767	AA548600	Sequence 1819	AA628547
Sequence 1768	AA550854	Sequence 1820	AA630611
Sequence 1769	AA550855	Sequence 1821	AA631326
Sequence 1770	AA551351	Sequence 1822	AA633909
Sequence 1771	AA551391	Sequence 1823	AA634260
Sequence 1772	AA554437	Sequence 1824	AA634298
Sequence 1773	AA554735	Sequence 1825	AA640505
Sequence 1774	AA555102	Sequence 1826	AA641289
Sequence 1775	AA564272	Sequence 1827	AA644625
Sequence 1776	AA564870	Sequence 1828	AA648944
Sequence 1777	AA565420	Sequence 1829	AA651720
Sequence 1778	AA568936	Sequence 1830	AA652478
Sequence 1779	AA569816	Sequence 1831	AA652505
Sequence 1780	AA569851	Sequence 1832	AA653775
Sequence 1781	AA569916	Sequence 1833	AA658374
Sequence 1782	AA573761	Sequence 1834	AA663005
Sequence 1783	AA573787	Sequence 1835	AA669154
Sequence 1784	AA577537	Sequence 1836	AA677560
Sequence 1785	AA578881	Sequence 1837	AA677750
Sequence 1786	AA579591	Sequence 1838	AA678185
Sequence 1787	AA579890	Sequence 1839	AA678251
Sequence 1788	AA580835	Sequence 1840	AA687495
Sequence 1789	AA582093	Sequence 1841	AA703208
Sequence 1790	AA582866	Sequence 1842	AA703667
Sequence 1791	AA583055	Sequence 1843	AA703907
Sequence 1792	AA583498	Sequence 1844	AA704208
Sequence 1793	AA583567	Sequence 1845	AA706347
Sequence 1794	AA583773	Sequence 1846	AA714010
Sequence 1795	AA584921	Sequence 1847	AA715984
Sequence 1796	AA586755	Sequence 1848	AA716651
Sequence 1797	AA587140	Sequence 1849	AA719530
Sequence 1798	AA587315	Sequence 1850	AA721642
Sequence 1799	AA587873	Sequence 1851	AA729381
Sequence 1800	AA593983	Sequence 1852	AA731946
Sequence 1801	AA594366	Sequence 1853	AA736817
Sequence 1802	AA595624	Sequence 1854	AA742713
Sequence 1803	AA595771	Sequence 1855	AA743278
Sequence 1804	AA599454	Sequence 1856	AA744681
Sequence 1805	AA600227	Sequence 1857	AA745953
Sequence 1806	AA600771	Sequence 1858	AA759195
Sequence 1807	AA601172	Sequence 1859	AA767779
Sequence 1808	AA602395	Sequence 1860	AA769697
Sequence 1809	AA602871	Sequence 1861	AA773998
Sequence 1810	AA603125	Sequence 1862	AA775058
Sequence 1811	AA603177	Sequence 1863	AA776593
Sequence 1812	AA604324	Sequence 1864	AA777384
Sequence 1813	AA604853	Sequence 1865	AA778672
Sequence 1814	AA610279	Sequence 1866	AA779949
Sequence 1815	AA610476	Sequence 1867	AA781487
Sequence 1816	AA610734	Sequence 1868	AA788907
Sequence 1817	AA614482	Sequence 1869	AA806278

Table 1

Sequence 1870	AA806735	Sequence 1922	AB007867
Sequence 1871	AA808769	Sequence 1923	AB007900
Sequence 1872	AA810149	Sequence 1924	AB007916
Sequence 1873	AA811609	Sequence 1925	AB007923
Sequence 1874	AA813604	Sequence 1926	AB007957
Sequence 1875	AA826307	Sequence 1927	AB011103
Sequence 1876	AA833766	Sequence 1928	AB011143
Sequence 1877	AA833900	Sequence 1929	AB011151
Sequence 1878	AA837457	Sequence 1930	AB011166
Sequence 1879	AA843531	Sequence 1931	AB014533
Sequence 1880	AA845737	Sequence 1932	AB014542
Sequence 1881	AA846698	Sequence 1933	AB014560
Sequence 1882	AA846856	Sequence 1934	AB015630
Sequence 1883	AA852896	Sequence 1935	AB015856
Sequence 1884	AA856902	Sequence 1936	AB018281
Sequence 1885	AA857824	Sequence 1937	AB018284
Sequence 1886	AA857882	Sequence 1938	AB018285
Sequence 1887	AA861665	Sequence 1939	AB018289
Sequence 1888	AA865960	Sequence 1940	AB018305
Sequence 1889	AA868529	Sequence 1941	AB018327
Sequence 1890	AA873271	Sequence 1942	AB018331
Sequence 1891	AA877189	Sequence 1943	AB018337
Sequence 1892	AA884922	Sequence 1944	AB019409
Sequence 1893	AA886453	Sequence 1945	AB019563
Sequence 1894	AA906652	Sequence 1946	AB019568
Sequence 1895	AA906865	Sequence 1947	AB019691
Sequence 1896	AA918993	Sequence 1948	AB020682
Sequence 1897	AA926926	Sequence 1949	AB020718
Sequence 1898	AA928934	Sequence 1950	AB021288
Sequence 1899	AA932501	Sequence 1951	AB023154
Sequence 1900	AA933987	Sequence 1952	AB023219
Sequence 1901	AA935947	Sequence 1953	AB024704
Sequence 1902	AA937302	Sequence 1954	AB027467
Sequence 1903	AA937773	Sequence 1955	AB028069
Sequence 1904	AA947835	Sequence 1956	AB028624
Sequence 1905	AA954939	Sequence 1957	AB028969
Sequence 1906	AA962587	Sequence 1958	AB028986
Sequence 1907	AA962632	Sequence 1959	AB029000
Sequence 1908	AA972525	Sequence 1960	AB029004
Sequence 1909	AA976489	Sequence 1961	AB029028
Sequence 1910	AA983380	Sequence 1962	AC03044
Sequence 1911	AA984586	Sequence 1963	AC31479
Sequence 1912	AA992596	Sequence 1964	AF000670
Sequence 1913	AB002305	Sequence 1965	AF000974
Sequence 1914	AB002330	Sequence 1966	AF001893
Sequence 1915	AB002357	Sequence 1967	AF004562
Sequence 1916	AB002806	Sequence 1968	AF006043
Sequence 1917	AB003476	Sequence 1969	AF007135
Sequence 1918	AB004066	Sequence 1970	AF007151
Sequence 1919	AB006077	Sequence 1971	AF007170
Sequence 1920	AB006534	Sequence 1972	AF009615
Sequence 1921	AB006755	Sequence 1973	AF013759

Table 1

Sequence 1974	AF013988	Sequence 2026	AF062318
Sequence 1975	AF015283	Sequence 2027	AF063611
Sequence 1976	AF015767	Sequence 2028	AF064019
Sequence 1977	AF016507	Sequence 2029	AF068235
Sequence 1978	AF016582	Sequence 2030	AF068846
Sequence 1979	AF017790	Sequence 2031	AF070523
Sequence 1980	AF019767	Sequence 2032	AF070537
Sequence 1981	AF021351	Sequence 2033	AF070555
Sequence 1982	AF021819	Sequence 2034	AF070561
Sequence 1983	AF022229	Sequence 2035	AF070596
Sequence 1984	AF023266	Sequence 2036	AF070600
Sequence 1985	AF025439	Sequence 2037	AF070626
Sequence 1986	AF026166	Sequence 2038	AF070649
Sequence 1987	AF026939	Sequence 2039	AF070662
Sequence 1988	AF027205	Sequence 2040	AF070672
Sequence 1989	AF031385	Sequence 2041	AF071202
Sequence 1990	AF034607	Sequence 2042	AF071219
Sequence 1991	AF035286	Sequence 2043	AF071593
Sequence 1992	AF035309	Sequence 2044	AF073298
Sequence 1993	AF035313	Sequence 2045	AF075587
Sequence 1994	AF037204	Sequence 2046	AF077030
Sequence 1995	AF038661	Sequence 2047	AF077045
Sequence 1996	AF039019	Sequence 2048	AF077200
Sequence 1997	AF039291	Sequence 2049	AF077202
Sequence 1998	AF039843	Sequence 2050	AF077207
Sequence 1999	AF040990	Sequence 2051	AF081192
Sequence 2000	AF041483	Sequence 2052	AF081484
Sequence 2001	AF042385	Sequence 2053	AF083190
Sequence 2002	AF042729	Sequence 2054	AF085355
Sequence 2003	AF044588	Sequence 2055	AF086003
Sequence 2004	AF045184	Sequence 2056	AF086116
Sequence 2005	AF047438	Sequence 2057	AF086178
Sequence 2006	AF047472	Sequence 2058	AF086205
Sequence 2007	AF048977	Sequence 2059	AF086207
Sequence 2008	AF050171	Sequence 2060	AF086336
Sequence 2009	AF050199	Sequence 2061	AF086517
Sequence 2010	AF050639	Sequence 2062	AF087135
Sequence 2011	AF052124	Sequence 2063	AF087990
Sequence 2012	AF052135	Sequence 2064	AF088036
Sequence 2013	AF052149	Sequence 2065	AF091076
Sequence 2014	AF052164	Sequence 2066	AF092563
Sequence 2015	AF052169	Sequence 2067	AF095287
Sequence 2016	AF052180	Sequence 2068	AF095791
Sequence 2017	AF052514	Sequence 2069	AF097709
Sequence 2018	AF054183	Sequence 2070	AF100741
Sequence 2019	AF054187	Sequence 2071	AF100756
Sequence 2020	AF054840	Sequence 2072	AF100928
Sequence 2021	AF055012	Sequence 2073	AF104222
Sequence 2022	AF055033	Sequence 2074	AF104913
Sequence 2023	AF057299	Sequence 2075	AF104923
Sequence 2024	AF059252	Sequence 2076	AF107405
Sequence 2025	AF061258	Sequence 2077	AF120334

Table 1

Sequence 2078	AF124438	Sequence 2130	AI090524
Sequence 2079	AF124439	Sequence 2131	AI090623
Sequence 2080	AF125525	Sequence 2132	AI091425
Sequence 2081	AF131799	Sequence 2133	AI092971
Sequence 2082	AF131814	Sequence 2134	AI095477
Sequence 2083	AF139461	Sequence 2135	AI123229
Sequence 2084	AF139658	Sequence 2136	AI125642
Sequence 2085	AF144755	Sequence 2137	AI125874
Sequence 2086	AF147331	Sequence 2138	AI127013
Sequence 2087	AF150962	Sequence 2139	AI127556
Sequence 2088	AF151832	Sequence 2140	AI140291
Sequence 2089	AF151868	Sequence 2141	AI141130
Sequence 2090	AF151898	Sequence 2142	AI141847
Sequence 2091	AF151907	Sequence 2143	AI143899
Sequence 2092	AF152097	Sequence 2144	AI144100
Sequence 2093	AF159295	Sequence 2145	AI148251
Sequence 2094	AF176702	Sequence 2146	AI149429
Sequence 2095	AF190744	Sequence 2147	AI149592
Sequence 2096	AI004664	Sequence 2148	AI186028
Sequence 2097	AI004915	Sequence 2149	AI186042
Sequence 2098	AI016073	Sequence 2150	AI190341
Sequence 2099	AI016323	Sequence 2151	AI192367
Sequence 2100	AI016791	Sequence 2152	AI192629
Sequence 2101	AI018451	Sequence 2153	AI198930
Sequence 2102	AI018625	Sequence 2154	AI216969
Sequence 2103	AI022779	Sequence 2155	AI217003
Sequence 2104	AI023799	Sequence 2156	AI223292
Sequence 2105	AI026164	Sequence 2157	AI241706
Sequence 2106	AI027516	Sequence 2158	AI251743
Sequence 2107	AI031636	Sequence 2159	AI252466
Sequence 2108	AI033037	Sequence 2160	AI253330
Sequence 2109	AI034115	Sequence 2161	AI253335
Sequence 2110	AI037859	Sequence 2162	AI253338
Sequence 2111	AI041670	Sequence 2163	AI253375
Sequence 2112	AI042034	Sequence 2164	AI253379
Sequence 2113	AI042290	Sequence 2165	AI253436
Sequence 2114	AI051971	Sequence 2166	AI262380
Sequence 2115	AI056917	Sequence 2167	AI263674
Sequence 2116	AI057124	Sequence 2168	AI267162
Sequence 2117	AI066419	Sequence 2169	AI267185
Sequence 2118	AI078041	Sequence 2170	AI267209
Sequence 2119	AI081116	Sequence 2171	AI267289
Sequence 2120	AI081472	Sequence 2172	AI267307
Sequence 2121	AI081913	Sequence 2173	AI267321
Sequence 2122	AI082244	Sequence 2174	AI267454
Sequence 2123	AI082648	Sequence 2175	AI267502
Sequence 2124	AI084731	Sequence 2176	AI268293
Sequence 2125	AI085381	Sequence 2177	AI269060
Sequence 2126	AI087291	Sequence 2178	AI269369
Sequence 2127	AI087819	Sequence 2179	AI270183
Sequence 2128	AI088178	Sequence 2180	AI270472
Sequence 2129	AI089981	Sequence 2181	AI271786

Table 1

Sequence 2182	AI272827	Sequence 2234	AI589301
Sequence 2183	AI274047	Sequence 2235	AI597938
Sequence 2184	AI276341	Sequence 2236	AI608591
Sequence 2185	AI276839	Sequence 2237	AI608787
Sequence 2186	AI278611	Sequence 2238	AI608968
Sequence 2187	AI280022	Sequence 2239	AI609193
Sequence 2188	AI283548	Sequence 2240	AI609281
Sequence 2189	AI288965	Sequence 2241	AI623804
Sequence 2190	AI290565	Sequence 2242	AI628689
Sequence 2191	AI291683	Sequence 2243	AI636635
Sequence 2192	AI292286	Sequence 2244	AI650837
Sequence 2193	AI298472	Sequence 2245	AI654096
Sequence 2194	AI298941	Sequence 2246	AI660245
Sequence 2195	AI304857	Sequence 2247	AI669253
Sequence 2196	AI308959	Sequence 2248	AI670084
Sequence 2197	AI312552	Sequence 2249	AI674313
Sequence 2198	AI333055	Sequence 2250	AI678152
Sequence 2199	AI333116	Sequence 2251	AI678703
Sequence 2200	AI335249	Sequence 2252	AI679044
Sequence 2201	AI336326	Sequence 2253	AI679321
Sequence 2202	AI345325	Sequence 2254	AI683140
Sequence 2203	AI366549	Sequence 2255	AI683338
Sequence 2204	AI367850	Sequence 2256	AI683793
Sequence 2205	AI375624	Sequence 2257	AI688798
Sequence 2206	AI376561	Sequence 2258	AI692866
Sequence 2207	AI399636	Sequence 2259	AI694087
Sequence 2208	AI417384	Sequence 2260	AI696819
Sequence 2209	AI421720	Sequence 2261	AI697501
Sequence 2210	AI424841	Sequence 2262	AI734922
Sequence 2211	AI431507	Sequence 2263	AI735069
Sequence 2212	AI433180	Sequence 2264	AI739337
Sequence 2213	AI434084	Sequence 2265	AI739377
Sequence 2214	AI434401	Sequence 2266	AI743595
Sequence 2215	AI436016	Sequence 2267	AI743691
Sequence 2216	AI436448	Sequence 2268	AI750198
Sequence 2217	AI446503	Sequence 2269	AI750909
Sequence 2218	AI453199	Sequence 2270	AI751119
Sequence 2219	AI459028	Sequence 2271	AI751364
Sequence 2220	AI469237	Sequence 2272	AI751565
Sequence 2221	AI492520	Sequence 2273	AI752319
Sequence 2222	AI492769	Sequence 2274	AI752553
Sequence 2223	AI494344	Sequence 2275	AI752929
Sequence 2224	AI523940	Sequence 2276	AI753108
Sequence 2225	AI524677	Sequence 2277	AI753671
Sequence 2226	AI538682	Sequence 2278	AI754437
Sequence 2227	AI557059	Sequence 2279	AI755181
Sequence 2228	AI561260	Sequence 2280	AI758869
Sequence 2229	AI567988	Sequence 2281	AI761927
Sequence 2230	AI569715	Sequence 2282	AI763126
Sequence 2231	AI581291	Sequence 2283	AI791906
Sequence 2232	AI583211	Sequence 2284	AI793120
Sequence 2233	AI583570	Sequence 2285	AI799521

Table 1

Sequence 2286	AI804346	Sequence 2338	AL049959
Sequence 2287	AI808109	Sequence 2339	AL049987
Sequence 2288	AI811021	Sequence 2340	AL049999
Sequence 2289	AI811845	Sequence 2341	AL050011
Sequence 2290	AI814139	Sequence 2342	AL050089
Sequence 2291	AI814674	Sequence 2343	AL050141
Sequence 2292	AI815868	Sequence 2344	AL050171
Sequence 2293	AI822030	Sequence 2345	AL050187
Sequence 2294	AI827641	Sequence 2346	AL050198
Sequence 2295	AI859619	Sequence 2347	AL050217
Sequence 2296	AI864580	Sequence 2348	AL050392
Sequence 2297	AI878968	Sequence 2349	AL080062
Sequence 2298	AI879179	Sequence 2350	AL080186
Sequence 2299	AI879367	Sequence 2351	AL080235
Sequence 2300	AI879992	Sequence 2352	AL096857
Sequence 2301	AI888377	Sequence 2353	AL096858
Sequence 2302	AI911704	Sequence 2354	AL110197
Sequence 2303	AI911997	Sequence 2355	AL110235
Sequence 2304	AI912084	Sequence 2356	AL117237
Sequence 2305	AI916284	Sequence 2357	AL117499
Sequence 2306	AI916584	Sequence 2358	AL117534
Sequence 2307	AI923224	Sequence 2359	AL118999
Sequence 2308	AI924096	Sequence 2360	AL119085
Sequence 2309	AI928185	Sequence 2361	AL119157
Sequence 2310	AI929819	Sequence 2362	AW020479
Sequence 2311	AI936748	Sequence 2363	AW044114
Sequence 2312	AI950087	Sequence 2364	AW102841
Sequence 2313	AI955808	Sequence 2365	C02094
Sequence 2314	AJ001258	Sequence 2366	C16886
Sequence 2315	AJ002030	Sequence 2367	C18886
Sequence 2316	AJ006026	Sequence 2368	D00017
Sequence 2317	AJ011001	Sequence 2369	D00022
Sequence 2318	AJ011915	Sequence 2370	D00068
Sequence 2319	AJ012499	Sequence 2371	D00099
Sequence 2320	AJ223183	Sequence 2372	D00422
Sequence 2321	AL035802	Sequence 2373	D10495
Sequence 2322	AL035987	Sequence 2374	D13119
Sequence 2323	AL036801	Sequence 2375	D13287
Sequence 2324	AL037646	Sequence 2376	D13665
Sequence 2325	AL038985	Sequence 2377	D13866
Sequence 2326	AL039150	Sequence 2378	D14662
Sequence 2327	AL041780	Sequence 2379	D14697
Sequence 2328	AL044019	Sequence 2380	D14710
Sequence 2329	AL046804	Sequence 2381	D14812
Sequence 2330	AL049055	Sequence 2382	D15049
Sequence 2331	AL049227	Sequence 2383	D16431
Sequence 2332	AL049229	Sequence 2384	D16937
Sequence 2333	AL049296	Sequence 2385	D17188
Sequence 2334	AL049464	Sequence 2386	D17268
Sequence 2335	AL049953	Sequence 2387	D17409
Sequence 2336	AL049954	Sequence 2388	D17793
Sequence 2337	AL049955	Sequence 2389	D21063

Table 1

Sequenc 2390	D23660	Sequence 2442	E01650
Sequence 2391	D25542	Sequence 2443	E01797
Sequence 2392	D28759	Sequence 2444	E01813
Sequence 2393	D29677	Sequence 2445	E01827
Sequence 2394	D31767	Sequence 2446	E01979
Sequence 2395	D31784	Sequence 2447	E02628
Sequence 2396	D31883	Sequence 2448	E02651
Sequence 2397	D31890	Sequence 2449	E03569
Sequence 2398	D37991	Sequence 2450	E06721
Sequence 2399	D38491	Sequence 2451	E07218
Sequence 2400	D38583	Sequence 2452	F28779
Sequence 2401	D43948	Sequence 2453	F30276
Sequence 2402	D43950	Sequence 2454	F31082
Sequence 2403	D45248	Sequence 2455	H03854
Sequence 2404	D45887	Sequence 2456	H05412
Sequence 2405	D45915	Sequence 2457	H08994
Sequence 2406	D49489	Sequence 2458	H13339
Sequence 2407	D49547	Sequence 2459	H16426
Sequence 2408	D50310	Sequence 2460	H39960
S quence 2409	D50371	Sequence 2461	H48742
Sequence 2410	D55192	Sequence 2462	H59372
Sequence 2411	D55649	Sequence 2463	H60722
Sequence 2412	D56120	Sequence 2464	H69238
Sequence 2413	D59253	Sequence 2465	H72481
Sequence 2414	D78586	Sequence 2466	H75695
Sequence 2415	D79826	Sequence 2467	H78517
Sequence 2416	D79983	Sequence 2468	H79084
Sequence 2417	D79986	Sequence 2469	H84729
S quence 2418	D79997	Sequence 2470	H85709
Sequence 2419	D80006	Sequence 2471	H89654
Sequence 2420	D80012	Sequence 2472	J00269
Sequence 2421	D80087	Sequence 2473	J02621
Sequence 2422	D80253	Sequence 2474	J03005
Sequence 2423	D81635	Sequence 2475	J03040
Sequence 2424	D82128	Sequence 2476	J03171
Sequence 2425	D82348	Sequence 2477	J03191
Sequence 2426	D83197	Sequence 2478	J03210
Sequence 2427	D83327	Sequence 2479	J03464
Sequence 2428	D83784	Sequence 2480	J03473
Sequence 2429	D86227	Sequence 2481	J03799
Sequence 2430	D87437	Sequence 2482	J04080
Sequence 2431	D87442	Sequence 2483	J04164
Sequence 2432	D87470	Sequence 2484	J04177
Sequence 2433	D87666	Sequence 2485	J04765
Sequence 2434	D87667	Sequence 2486	J05013
Sequence 2435	D87682	Sequence 2487	J05021
Sequence 2436	D87735	Sequence 2488	J05192
Sequence 2437	D87969	Sequence 2489	J05633
Sequence 2438	D89052	Sequence 2490	K00558
Sequence 2439	D90226	Sequence 2491	K01566
Sequence 2440	D90373	Sequence 2492	K02765
Sequence 2441	E00882	Sequence 2493	L00160

Table 1

Sequence 2494	L02547	Sequence 2546	M24194
Sequence 2495	L05092	Sequence 2547	M25246
Sequence 2496	L05186	Sequence 2548	M26041
Sequence 2497	L07633	Sequence 2549	M26152
Sequence 2498	L11066	Sequence 2550	M26325
Sequence 2499	L11932	Sequence 2551	M27913
Sequence 2500	L12711	Sequence 2552	M27971
Sequence 2501	L13848	Sequence 2553	M28373
Sequence 2502	L14599	Sequence 2554	M31159
Sequence 2503	L19161	Sequence 2555	M31212
Sequence 2504	L19184	Sequence 2556	M31899
Sequence 2505	L19597	Sequence 2557	M32110
Sequence 2506	L20941	Sequence 2558	M32790
Sequence 2507	L23959	Sequence 2559	M32798
Sequence 2508	L26081	Sequence 2560	M33308
Sequence 2509	L27560	Sequence 2561	M34064
Sequence 2510	L28010	Sequence 2562	M37583
Sequence 2511	L28809	Sequence 2563	M38106
Sequence 2512	L33404	Sequence 2564	M55409
Sequence 2513	L33930	Sequence 2565	M55542
Sequence 2514	L34155	Sequence 2566	M58485
Sequence 2515	L34839	Sequence 2567	M60457
Sequence 2516	L38486	Sequence 2568	M60854
Sequence 2517	L42024	Sequence 2569	M62403
Sequence 2518	L43575	Sequence 2570	M62810
Sequence 2519	L44349	Sequence 2571	M64241
Sequence 2520	L54057	Sequence 2572	M67468
Sequence 2521	M10036	Sequence 2573	M69181
Sequence 2522	M10119	Sequence 2574	M74002
Sequence 2523	M10905	Sequence 2575	M75126
Sequence 2524	M11146	Sequence 2576	M76729
Sequence 2525	M13573	Sequence 2577	M78113
Sequence 2526	M13955	Sequence 2578	M81757
Sequence 2527	M14083	Sequence 2579	M83248
Sequence 2528	M14483	Sequence 2580	M84739
Sequence 2529	M14630	Sequence 2581	M87503
Sequence 2530	M14631	Sequence 2582	M88279
Sequence 2531	M15182	Sequence 2583	M92357
Sequence 2532	M15800	Sequence 2584	N20576
Sequence 2533	M16247	Sequence 2585	N34255
Sequence 2534	M16553	Sequence 2586	N35187
Sequence 2535	M16660	Sequence 2587	N35421
Sequence 2536	M16937	Sequence 2588	N39717
Sequence 2537	M17597	Sequence 2589	N40823
Sequence 2538	M17885	Sequence 2590	N40852
Sequence 2539	M20372	Sequence 2591	N67927
Sequence 2540	M22146	Sequence 2592	N76180
Sequence 2541	M22382	Sequence 2593	N76677
Sequence 2542	M22590	Sequence 2594	N77080
Sequence 2543	M22918	Sequence 2595	N84497
Sequence 2544	M22920	Sequence 2596	N86776
Sequence 2545	M23613	Sequence 2597	N91638

Table 1

Sequence 2598	N92086	Sequence 2650	U20896
Sequence 2599	N99205	Sequence 2651	U22431
Sequence 2600	Q37741	Sequence 2652	U22815
Sequence 2601	Q48043	Sequence 2653	U24105
Sequence 2602	Q65676	Sequence 2654	U24153
Sequence 2603	Q90526	Sequence 2655	U27768
Sequence 2604	R06046	Sequence 2656	U33760
Sequence 2605	R17092	Sequence 2657	U33833
Sequence 2606	R47228	Sequence 2658	U34877
Sequence 2607	R55150	Sequence 2659	U39361
Sequence 2608	R55398	Sequence 2660	U41515
Sequence 2609	R68132	Sequence 2661	U46570
Sequence 2610	R72676	Sequence 2662	U50733
Sequence 2611	R73306	Sequence 2663	U51586
Sequence 2612	R78333	Sequence 2664	U56255
Sequence 2613	R92367	Sequence 2665	U59305
Sequence 2614	R93637	Sequence 2666	U60975
Sequence 2615	R99649	Sequence 2667	U61083
Sequence 2616	S41458	Sequence 2668	U61397
Sequence 2617	S42303	Sequence 2669	U63846
Sequence 2618	S54005	Sequence 2670	U67784
Sequence 2619	S66431	Sequence 2671	U68723
Sequence 2620	S70154	Sequence 2672	U68727
Sequence 2621	S70290	Sequence 2673	U68758
Sequence 2622	S79895	Sequence 2674	U70735
Sequence 2623	S82076	Sequence 2675	U77085
Sequence 2624	T02792	Sequence 2676	U79258
Sequence 2625	T24119	Sequence 2677	U79274
Sequence 2626	T49314	Sequence 2678	U79278
Sequence 2627	T53479	Sequence 2679	U80213
Sequence 2628	T58797	Sequence 2680	U81234
Sequence 2629	T64560	Sequence 2681	U82130
Sequence 2630	T66112	Sequence 2682	U86602
Sequence 2631	T92160	Sequence 2683	U87309
Sequence 2632	T92396	Sequence 2684	U90028
Sequence 2633	U00947	Sequence 2685	U90441
Sequence 2634	U04815	Sequence 2686	U90902
Sequence 2635	U07151	Sequence 2687	U90917
Sequence 2636	U07857	Sequence 2688	U94831
Sequence 2637	U08470	Sequence 2689	V00478
Sequence 2638	U10323	Sequence 2690	V00503
Sequence 2639	U10439	Sequence 2691	V05728
Sequence 2640	U12465	Sequence 2692	V11636
Sequence 2641	U13665	Sequence 2693	V57903
Sequence 2642	U13877	Sequence 2694	V59662
Sequence 2643	U14550	Sequence 2695	V59746
Sequence 2644	U14966	Sequence 2696	V84428
Sequence 2645	U15008	Sequence 2697	V86232
Sequence 2646	U16306	Sequence 2698	V87930
Sequence 2647	U17104	Sequence 2699	W07215
Sequence 2648	U17496	Sequence 2700	W19127
Sequence 2649	U19769	Sequence 2701	W19407

Table 1

Sequence 2702	W19441	Sequence 2754	X71087
Sequence 2703	W25547	Sequence 2755	X73608
Sequence 2704	W26197	Sequence 2756	X73902
Sequence 2705	W38952	Sequence 2757	X74039
Sequence 2706	W56388	Sequence 2758	X74801
Sequence 2707	W68015	Sequence 2759	X74979
Sequence 2708	W73140	Sequence 2760	X76013
Sequence 2709	W73168	Sequence 2761	X76180
Sequence 2710	W76204	Sequence 2762	X78627
Sequence 2711	W87522	Sequence 2763	X81109
Sequence 2712	W87891	Sequence 2764	X82676
Sequence 2713	X00351	Sequence 2765	X84939
Sequence 2714	X00497	Sequence 2766	X85373
Sequence 2715	X01742	Sequence 2767	X93036
Sequence 2716	X01924	Sequence 2768	X93207
Sequence 2717	X03084	Sequence 2769	X94323
Sequence 2718	X04098	Sequence 2770	X94754
Sequence 2719	X04408	Sequence 2771	X97324
Sequence 2720	X04470	Sequence 2772	X99920
Sequence 2721	X05276	Sequence 2773	Y00503
Sequence 2722	X05908	Sequence 2774	Y00757
Sequence 2723	X06700	Sequence 2775	Y00815
Sequence 2724	X07819	Sequence 2776	Y09188
Sequence 2725	X13425	Sequence 2777	Y11435
Sequence 2726	X14420	Sequence 2778	Y12065
Sequence 2727	X15729	Sequence 2779	Y13247
Sequence 2728	X15880	Sequence 2780	Y13286
Sequence 2729	X16869	Sequence 2781	Y15286
Sequence 2730	X17206	Sequence 2782	Y17114
Sequence 2731	X24068	Sequence 2783	Z18538
Sequence 2732	X37385	Sequence 2784	Z18954
Sequence 2733	X37509	Sequence 2785	Z19054
Sequence 2734	X40178	Sequence 2786	Z21507
Sequence 2735	X51466	Sequence 2787	Z26317
Sequence 2736	X53505	Sequence 2788	Z29093
Sequence 2737	X54304	Sequence 2789	Z31696
Sequence 2738	X54941	Sequence 2790	Z32564
Sequence 2739	X55110	Sequence 2791	Z36531
Sequence 2740	X55885	Sequence 2792	Z37986
Sequence 2741	X56932	Sequence 2793	Z46629
Sequence 2742	X56998	Sequence 2794	Z47087
Sequence 2743	X56999	Sequence 2795	Z74615
Sequence 2744	X57766		
Sequence 2745	X62744		
Sequence 2746	X63432		
Sequence 2747	X66360		
Sequence 2748	X67698		
Sequence 2749	X68277		
Sequence 2750	X68880		
Sequence 2751	X69398		
Sequence 2752	X69838		
Sequence 2753	X70340		

Table 1

Sequence 340: found in patent publication W098/39446

AGGCGTNCCTCTGACTGCCCACTCAGTGGCNCACCNNGGAGCTGNTTTGGNGCTTTGGG
GANCCTNAACANTTNCNTCTTTCAAACACTNACTGGC

Sequence 1962: found in patent publication W098/42738

AGGTACCCGCTCTCCTGCTTCAGTAAATCTCCACTCGATCTCAGTGGGTTTCCTGTCCAT
AGGATCCACAAGTTTGACCTGGCGGTGGAGCAAGGGGGCTTCACTAGGGATCATGGTTCC
CCGGTAATCCATGGTCTTGCCAATGTAGCCGGTAATGTGTGTTAGCCCTCCCACGACCA
CCCAGTTTCGCTGCCGGATAACTTGAACCACTTTGCCCTGCTTCCCGGCATCCTTGCCTT
CTAGGATCTCCACCGTGTCCCCACAGAACAGATACCAAGTCTTCATCAGAGATGGGTTC
ACAACCACTGGGCGCCGNCCTGATCCATGGGGGGTCTTCTCTTGTCTGCAACAGAGCC
TGGGGGGCTCATCCATAACGGTNATGGGGGGGCGAGGTGACCTTGGATGCCAAGGCCAGC
AGGGGCAAGAAAGACCCATGCCTGGAGTTGNAAGAAAATCCCTTTGCCAGCAAAAACGC
TTCGAAACCTTNCCTGTCAAGCTTTTCACTTTTCCGNGGCACCTTTGGGATTTTA
GCACATTGGGGCCCTTAAGNGTTCCTTCCCC

Sequence 341: found in patent publication W099/039941

CCCTTAGCGNGGTGCGGCCGAGGCACAATTCGATTATTCACANGAAAGGGCAAACGTGT
NNTGTTNGCTGGCAGGAGNAGGTGCATATATACCAGCACTTCAAGTNNGGTATTTCCATT
CAGGACATTTTATCTCTGTGCAAAGACCGGAGTAGAAGCTGATGAGTGGATCAAGATATT
ACGCTGGAATTTGTCACAAATAAGAAAACAGCTCAACCAAGGGGAAGGCACCGATCCGAT
CTCGGTGCTTCATCTTTAAATAGATCTTCTTGCCAAGGAATGCTCTGGCCCAGGAGCAA
GGTGAATGCTTCCCTGACGCTGCGATCTGCAGCAGACTNCAAATGAAAACCGACTAAGG
ATTTTCTTTCAAAAACAAATCAGAAGCAGATGCTGATTGGGACCCATATACCACGTTGCT
GACTCACCGTTGCTGCCCTTNCATGGATGTTGCCATCTGCTTGAGAACACTGAAGCAATC
ACCATTCTNGATANGAAAGTGCTTAAACCCCACTCTTAGGGCTGCTCACTTCTTAGAAC
ACACAAAGGGAAGAGGAAAGGGGT

Sequence 342: found in patent publication W099/18126

CCGCGGTGGCGGCCCGCCCGGGCAGGTACCTACAGTGACACAGATCCCCTCCCGCCATCCT
GGTCACACTGAATAACAAAGGGAAGAGAGGAGTAAGAAGTGTAGTATCTAGAAATTCTCA
GCACAGTGAAGGAAAGTGATCTTCTACTTTGTATTAGGCCCTAAAAAAGGAGGGGACGGG
CCCGGCACAGTGGCTCACACCTGTAATCCCAGCACTCTGGGAGGCCAAGGAGGGCAGATC
ACCTGAGGTTGGGAGTTTGAGACCAGCCTGACCAACATGGAGAAACCTGTCTCTACTAA
AAACACAAAATTAGCCAGGCATGGTGGCATGCGCCTATAAACCAAGCTACTCAAGAGGCT
GAGGCAGGAGAATTGCTTGAACCCAGGAGGCAGAGGTTGTGGTGAGCCAAGATCGAGCCA
TCACACTCCAGCCTGGGCAACAAGAGCAAACTCTGTCTCAAAAAAAAAAACAGGAGAGG
AGGGAG

Sequence 1016: found in patent publication W099/38881

CTACTTAGGGCGAATTGGAGCTCCCCGCGGTGGCGGCCGAGGTCAAGCTTCGACCCCGCG
TCCGTGATAAACTACTTTTGGGTTTTATTTCAATTGAGGCACCTTTTTTATTGTTTGAATG
ATTCCGGCTTGTAATATATCAGCCTCTACAATGAAATGCAGAAGAGTTCATTTTTCTAG
ATCTGTTTTTCATTAGAAATATTGACAAAACACATTGTCAACCTGGATCCTTTGACA
TTTACTTAACTCTGGCATGTTCACAAAAAGTAGAACTCTAAGAGACCATTACCATTTT
TCACAGATGTATAGGGGATGTATTCTAAAACTGACAGAAAAGAGAAATNTGATAGTCAAC
ACTGTTAACTTTTACTGNGTAATTGCCAAATACACTTTTCCAAATTTGTCCCAACAGCC
TNTAAGCCAGCTTTCTCTATATTTATAA

Sequence 1963: found in patent publication W099/46289

AACTGGACAGAGTAAGGGAATTCCAGCATCCTTTCCTGCTTGTCTGTTACCCACAG

Table 1

ATCAAACCCTCAATTCTAGTTGGGGATGCTGTCTAGCCCCACACCATGACTGAAGCCTTA
AGCACTGTTGCGCCTCATGTGCTTTGGATCAGCAACCCAGTGGTATTCTACCAGAGCAT
TGTGGGAAAGCAGATGTATAGTCAGGTCCCAACAGCAAATTGTTGGGTGTGAGAGTTCTA
AAGTATAGGGGTGAGGGAAGAGAAGGATATGAACTCCTCTGACCTTAAGCCAGCATTTCAT
TTAACTTTTATGTCTACTTAACAAGAGAACCTGNAGAAAACTACCGTATTCAAGAGATA
ATCAAAATCAGTGTTTTAGCCAGGCGATGACAGAGAAGCACCATTTCCTCACCCTCCATTG
TTGTAATGTCTGTAATAAATTTTCAGTGCGTCAGGATGGATGAACCCAAGATCCAGTGAAT
GATTCAGCTGTTCCAAGCCTTACATTTTCCATCATTATCATCCATTCTCATTTCAGTGA
ACCTCTTGCACTATTGTGGTTAATTTTATGTAAAACCAAGTTTATGTTTTTTTTTAATAT
GTGCCTATGTAATAAAAGTCTACACACTGGCAAAAAAAAAAAAAAAAAAAAAAGTCCTN

TABLE 1A

patent seq name	acc	dbase	Sequence 52	AA112308	dbEST
Sequence 1	AA001066	dbEST	Sequence 53	AA112375	dbEST
Sequence 2	AA007157	dbEST	Sequence 54	AA113860	dbEST
Sequence 3	AA010954	dbEST	Sequence 55	AA114120	dbEST
Sequence 4	AA015792	dbEST	Sequence 56	AA115118	dbEST
Sequence 5	AA019769	dbEST	Sequence 57	AA115368	dbEST
Sequence 6	AA019948	dbEST	Sequence 58	AA122286	dbEST
Sequence 7	AA022925	dbEST	Sequence 59	AA122348	dbEST
Sequence 8	AA022937	dbEST	Sequence 60	AA126109	dbEST
Sequence 9	AA024405	dbEST	Sequence 61	AA127105	dbEST
Sequence 10	AA029750	dbEST	Sequence 62	AA127132	dbEST
Sequence 11	AA031509	dbEST	Sequence 63	AA127418	dbEST
Sequence 12	AA033876	dbEST	Sequence 64	AA128305	dbEST
Sequence 13	AA034237	dbEST	Sequence 65	AA129461	dbEST
Sequence 14	AA039967	dbEST	Sequence 66	AA130252	dbEST
Sequence 15	AA040073	dbEST	Sequence 67	AA130547	dbEST
Sequence 16	AA040122	dbEST	Sequence 68	AA130786	dbEST
Sequence 17	AA045732	dbEST	Sequence 69	AA131041	dbEST
Sequence 18	AA045861	dbEST	Sequence 70	AA131065	dbEST
Sequence 19	AA046835	dbEST	Sequence 71	AA131104	dbEST
Sequence 20	AA047026	dbEST	Sequence 72	AA131155	dbEST
Sequence 21	AA047417	dbEST	Sequence 73	AA131160	dbEST
Sequence 22	AA053486	dbEST	Sequence 74	AA132182	dbEST
Sequence 23	AA054658	dbEST	Sequence 75	AA132568	dbEST
Sequence 24	AA055606	dbEST	Sequence 76	AA132598	dbEST
Sequence 25	AA056113	dbEST	Sequence 77	AA133351	dbEST
Sequence 26	AA056176	dbEST	Sequence 78	AA133927	dbEST
Sequence 27	AA056363	dbEST	Sequence 79	AA134105	dbEST
Sequence 28	AA056431	dbEST	Sequence 80	AA134210	dbEST
Sequence 29	AA065336	dbEST	Sequence 81	AA135032	dbEST
Sequence 30	AA069781	dbEST	Sequence 82	AA135919	dbEST
Sequence 31	AA069784	dbEST	Sequence 83	AA136383	dbEST
Sequence 32	AA069839	dbEST	Sequence 84	AA136789	dbEST
Sequence 33	AA069983	dbEST	Sequence 85	AA143609	dbEST
Sequence 34	AA071255	dbEST	Sequence 86	AA146773	dbEST
Sequence 35	AA075135	dbEST	Sequence 87	AA147806	dbEST
Sequence 36	AA081655	dbEST	Sequence 88	AA148160	dbEST
Sequence 37	AA082245	dbEST	Sequence 89	AA148268	dbEST
Sequence 38	AA083471	dbEST	Sequence 90	AA148771	dbEST
Sequence 39	AA083510	dbEST	Sequence 91	AA149056	dbEST
Sequence 40	AA085862	dbEST	Sequence 92	AA150307	dbEST
Sequence 41	AA085872	dbEST	Sequence 93	AA151310	dbEST
Sequence 42	AA085947	dbEST	Sequence 94	AA151775	dbEST
Sequence 43	AA088770	dbEST	Sequence 95	AA152037	dbEST
Sequence 44	AA100333	dbEST	Sequence 96	AA152416	dbEST
Sequence 45	AA100719	dbEST	Sequence 97	AA155853	dbEST
Sequence 46	AA100793	dbEST	Sequence 98	AA155926	dbEST
Sequence 47	AA100852	dbEST	Sequence 99	AA157405	dbEST
Sequence 48	AA101270	dbEST	Sequence 100	AA157725	dbEST
Sequence 49	AA101561	dbEST	Sequence 101	AA157788	dbEST
Sequence 50	AA111907	dbEST	Sequence 102	AA158165	dbEST
Sequence 51	AA112043	dbEST	Sequence 103	AA158171	dbEST

TABLE 1A

Sequence 104	AA159272	dbEST	Sequence 156	AA304961	dbEST
Sequence 105	AA160114	dbEST	Sequence 157	AA305193	dbEST
Sequence 106	AA160685	dbEST	Sequence 158	AA305438	dbEST
Sequence 107	AA161410	dbEST	Sequence 159	AA306542	dbEST
Sequence 108	AA164405	dbEST	Sequence 160	AA306708	dbEST
Sequence 109	AA164465	dbEST	Sequence 161	AA306945	dbEST
Sequence 110	AA165083	dbEST	Sequence 162	AA307239	dbEST
Sequence 111	AA165629	dbEST	Sequence 163	AA307477	dbEST
Sequence 112	AA166973	dbEST	Sequence 164	AA307504	dbEST
Sequence 113	AA171510	dbEST	Sequence 165	AA307697	dbEST
Sequence 114	AA173031	dbEST	Sequence 166	AA307779	dbEST
Sequence 115	AA173470	dbEST	Sequence 167	AA308062	dbEST
Sequence 116	AA173630	dbEST	Sequence 168	AA308801	dbEST
Sequence 117	AA179462	dbEST	Sequence 169	AA309028	dbEST
Sequence 118	AA187003	dbEST	Sequence 170	AA309988	dbEST
Sequence 119	AA187958	dbEST	Sequence 171	AA311006	dbEST
Sequence 120	AA188591	dbEST	Sequence 172	AA311481	dbEST
Sequence 121	AA192108	dbEST	Sequence 173	AA312012	dbEST
Sequence 122	AA199710	dbEST	Sequence 174	AA313684	dbEST
Sequence 123	AA203224	dbEST	Sequence 175	AA314146	dbEST
Sequence 124	AA203284	dbEST	Sequence 176	AA315049	dbEST
Sequence 125	AA205851	dbEST	Sequence 177	AA315308	dbEST
Sequence 126	AA209431	dbEST	Sequence 178	AA315426	dbEST
Sequence 127	AA209531	dbEST	Sequence 179	AA316682	dbEST
Sequence 128	AA214075	dbEST	Sequence 180	AA319958	dbEST
Sequence 129	AA216612	dbEST	Sequence 181	AA320346	dbEST
Sequence 130	AA224230	dbEST	Sequence 182	AA320991	dbEST
Sequence 131	AA224985	dbEST	Sequence 183	AA328544	dbEST
Sequence 132	AA226502	dbEST	Sequence 184	AA330457	dbEST
Sequence 133	AA229225	dbEST	Sequence 185	AA338793	dbEST
Sequence 134	AA232626	dbEST	Sequence 186	AA340069	dbEST
Sequence 135	AA233843	dbEST	Sequence 187	AA341170	dbEST
Sequence 136	AA242891	dbEST	Sequence 188	AA342394	dbEST
Sequence 137	AA250725	dbEST	Sequence 189	AA348250	dbEST
Sequence 138	AA250982	dbEST	Sequence 190	AA349148	dbEST
Sequence 139	AA256959	dbEST	Sequence 191	AA351443	dbEST
Sequence 140	AA259077	dbEST	Sequence 192	AA351880	dbEST
Sequence 141	AA262440	dbEST	Sequence 193	AA356158	dbEST
Sequence 142	AA263110	dbEST	Sequence 194	AA356187	dbEST
Sequence 143	AA283165	dbEST	Sequence 195	AA356195	dbEST
Sequence 144	AA285260	dbEST	Sequence 196	AA357374	dbEST
Sequence 145	AA287112	dbEST	Sequence 197	AA367446	dbEST
Sequence 146	AA292191	dbEST	Sequence 198	AA375236	dbEST
Sequence 147	AA292334	dbEST	Sequence 199	AA377718	dbEST
Sequence 148	AA292385	dbEST	Sequence 200	AA380997	dbEST
Sequence 149	AA292771	dbEST	Sequence 201	AA383917	dbEST
Sequence 150	AA293273	dbEST	Sequence 202	AA385147	dbEST
Sequence 151	AA293572	dbEST	Sequence 203	AA389641	dbEST
Sequence 152	AA295348	dbEST	Sequence 204	AA393164	dbEST
Sequence 153	AA295485	dbEST	Sequence 205	AA393236	dbEST
Sequence 154	AA301631	dbEST	Sequence 206	AA394242	dbEST
Sequence 155	AA304669	dbEST	Sequence 207	AA398732	dbEST

TABLE 1A

Sequence 208	AA401864	dbEST	Sequence 260	AA573893	dbEST
Sequence 209	AA410508	dbEST	Sequence 261	AA574237	dbEST
Sequence 210	AA410580	dbEST	Sequence 262	AA576866	dbEST
Sequence 211	AA410942	dbEST	Sequence 263	AA579034	dbEST
Sequence 212	AA411334	dbEST	Sequence 264	AA579816	dbEST
Sequence 213	AA411599	dbEST	Sequence 265	AA581220	dbEST
Sequence 214	AA418061	dbEST	Sequence 266	AA581264	dbEST
Sequence 215	AA418473	dbEST	Sequence 267	AA582093	dbEST
Sequence 216	AA418970	dbEST	Sequence 268	AA583091	dbEST
Sequence 217	AA420789	dbEST	Sequence 269	AA584411	dbEST
Sequence 218	AA421682	dbEST	Sequence 270	AA586776	dbEST
Sequence 219	AA421850	dbEST	Sequence 271	AA587110	dbEST
Sequence 220	AA424529	dbEST	Sequence 272	AA587233	dbEST
Sequence 221	AA428421	dbEST	Sequence 273	AA587700	dbEST
Sequence 222	AA429754	dbEST	Sequence 274	AA609259	dbEST
Sequence 223	AA441787	dbEST	Sequence 275	AA609837	dbEST
Sequence 224	AA451633	dbEST	Sequence 276	AA613907	dbEST
Sequence 225	AA453309	dbEST	Sequence 277	AA614529	dbEST
Sequence 226	AA453559	dbEST	Sequence 278	AA618033	dbEST
Sequence 227	AA453570	dbEST	Sequence 279	AA628487	dbEST
Sequence 228	AA454871	dbEST	Sequence 280	AA631204	dbEST
Sequence 229	AA454913	dbEST	Sequence 281	AA631811	dbEST
Sequence 230	AA456892	dbEST	Sequence 282	AA640901	dbEST
Sequence 231	AA457048	dbEST	Sequence 283	AA641841	dbEST
Sequence 232	AA463426	dbEST	Sequence 284	AA642215	dbEST
Sequence 233	AA465039	dbEST	Sequence 285	AA643602	dbEST
Sequence 234	AA477173	dbEST	Sequence 286	AA651720	dbEST
Sequence 235	AA480921	dbEST	Sequence 287	AA664996	dbEST
Sequence 236	AA484050	dbEST	Sequence 288	AA668297	dbEST
Sequence 237	AA484756	dbEST	Sequence 289	AA668836	dbEST
Sequence 238	AA487483	dbEST	Sequence 290	AA675923	dbEST
Sequence 239	AA489640	dbEST	Sequence 291	AA687833	dbEST
Sequence 240	AA493886	dbEST	Sequence 292	AA704992	dbEST
Sequence 241	AA494493	dbEST	Sequence 293	AA732702	dbEST
Sequence 242	AA496518	dbEST	Sequence 294	AA745241	dbEST
Sequence 243	AA501749	dbEST	Sequence 295	AA746481	dbEST
Sequence 244	AA501822	dbEST	Sequence 296	AA758889	dbEST
Sequence 245	AA501945	dbEST	Sequence 297	AA772570	dbEST
Sequence 246	AA504490	dbEST	Sequence 298	AA772790	dbEST
Sequence 247	AA507234	dbEST	Sequence 299	AA776709	dbEST
Sequence 248	AA513640	dbEST	Sequence 300	AA776811	dbEST
Sequence 249	AA526227	dbEST	Sequence 301	AA777384	dbEST
Sequence 250	AA526889	dbEST	Sequence 302	AA778116	dbEST
Sequence 251	AA527139	dbEST	Sequence 303	AA779868	dbEST
Sequence 252	AA527188	dbEST	Sequence 304	AA781343	dbEST
Sequence 253	AA531428	dbEST	Sequence 305	AA809984	dbEST
Sequence 254	AA532633	dbEST	Sequence 306	AA810945	dbEST
Sequence 255	AA535471	dbEST	Sequence 307	AA811200	dbEST
Sequence 256	AA554757	dbEST	Sequence 308	AA825768	dbEST
Sequence 257	AA565996	dbEST	Sequence 309	AA828073	dbEST
Sequence 258	AA568217	dbEST	Sequence 310	AA828722	dbEST
Sequence 259	AA573742	dbEST	Sequence 311	AA843176	dbEST

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Sequence 312	AA843661	dbEST	Sequence 364	AF038451	ANUC
Sequence 313	AA876526	dbEST	Sequence 365	AF038662	ANUC
Sequence 314	AA883255	dbEST	Sequence 366	AF038963	ANUC
Sequence 315	AA906652	dbEST	Sequence 367	AF043431	ANUC
Sequence 316	AA917638	dbEST	Sequence 368	AF044956	ANUC
Sequence 317	AA927734	dbEST	Sequence 369	AF045941	ANUC
Sequence 318	AA954939	dbEST	Sequence 370	AF046997	ANUC
Sequence 319	AA962622	dbEST	Sequence 371	AF051894	ANUC
Sequence 320	AA991285	dbEST	Sequence 372	AF052124	ANUC
Sequence 321	AB000115	ANUC	Sequence 373	AF052578	ANUC
Sequence 322	AB004047	ANUC	Sequence 374	AF053233	ANUC
Sequence 323	AB006746	ANUC	Sequence 375	AF054838	ANUC
Sequence 324	AB007619	ANUC	Sequence 376	AF055012	ANUC
Sequence 325	AB007860	ANUC	Sequence 377	AF061736	ANUC
Sequence 326	AB007965	ANUC	Sequence 378	AF061738	ANUC
Sequence 327	AB011101	ANUC	Sequence 379	AF064603	ANUC
Sequence 328	AB011169	ANUC	Sequence 380	AF064854	ANUC
Sequence 329	AB012701	ANUC	Sequence 381	AF065388	ANUC
Sequence 330	AB014536	ANUC	Sequence 382	AF067168	ANUC
Sequence 331	AB014565	ANUC	Sequence 383	AF067174	ANUC
Sequence 332	AB019568	ANUC	Sequence 384	AF067817	ANUC
Sequence 333	AB020623	ANUC	Sequence 385	AF070523	ANUC
Sequence 334	AB020629	ANUC	Sequence 386	AF070561	ANUC
Sequence 335	AB020693	ANUC	Sequence 387	AF070562	ANUC
Sequence 336	AB021288	ANUC	Sequence 388	AF070596	ANUC
Sequence 337	AB022663	ANUC	Sequence 389	AF070664	ANUC
Sequence 338	AB023214	ANUC	Sequence 390	AF070674	ANUC
Sequence 339	AB023230	ANUC	Sequence 391	AF077048	ANUC
Sequence 340	AC02059	PREPATNUC	Sequence 392	AF077051	ANUC
Sequence 341	AC03653	PREPATNUC	Sequence 393	AF077200	ANUC
Sequence 342	AC13415	PREPATNUC	Sequence 394	AF077671	ANUC
Sequence 343	AF000982	ANUC	Sequence 395	AF080246	ANUC
Sequence 344	AF002985	ANUC	Sequence 396	AF081484	ANUC
Sequence 345	AF005654	ANUC	Sequence 397	AF083470	ANUC
Sequence 346	AF006086	ANUC	Sequence 398	AF084523	ANUC
Sequence 347	AF007791	ANUC	Sequence 399	AF085355	ANUC
Sequence 348	AF013758	ANUC	Sequence 400	AF086003	ANUC
Sequence 349	AF013988	ANUC	Sequence 401	AF086080	ANUC
Sequence 350	AF021232	ANUC	Sequence 402	AF086183	ANUC
Sequence 351	AF026939	ANUC	Sequence 403	AF086545	ANUC
Sequence 352	AF026941	ANUC	Sequence 404	AF091263	ANUC
Sequence 353	AF026942	ANUC	Sequence 405	AF111713	ANUC
Sequence 354	AF026943	ANUC	Sequence 406	AF118023	ANUC
Sequence 355	AF026944	ANUC	Sequence 407	AF124438	ANUC
Sequence 356	AF028832	ANUC	Sequence 408	AF124439	ANUC
Sequence 357	AF030455	ANUC	Sequence 409	AF131808	ANUC
Sequence 358	AF030514	ANUC	Sequence 410	AF131820	ANUC
Sequence 359	AF031469	ANUC	Sequence 411	AF131848	ANUC
Sequence 360	AF033095	ANUC	Sequence 412	AF132966	ANUC
Sequence 361	AF035286	ANUC	Sequence 413	AF132968	ANUC
Sequence 362	AF035316	ANUC	Sequence 414	AF146277	ANUC
Sequence 363	AF037204	ANUC	Sequence 415	AF147331	ANUC

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Sequence 416	AF150100	ANUC	Sequence 468	AI417973	dbEST
Sequence 417	AF150266	dbEST	Sequence 469	AI431963	dbEST
Sequence 418	AF151873	ANUC	Sequence 470	AI453405	dbEST
Sequence 419	AF151877	ANUC	Sequence 471	AI457157	dbEST
Sequence 420	AF151978	ANUC	Sequence 472	AI457624	dbEST
Sequence 421	AF167160	ANUC	Sequence 473	AI459679	dbEST
Sequence 422	AI023413	dbEST	Sequence 474	AI460010	dbEST
Sequence 423	AI027888	dbEST	Sequence 475	AI469095	dbEST
Sequence 424	AI031811	dbEST	Sequence 476	AI469715	dbEST
Sequence 425	AI033687	dbEST	Sequence 477	AI471539	dbEST
Sequence 426	AI042140	dbEST	Sequence 478	AI476335	dbEST
Sequence 427	AI075324	dbEST	Sequence 479	AI479289	dbEST
Sequence 428	AI075876	dbEST	Sequence 480	AI499285	dbEST
Sequence 429	AI126802	dbEST	Sequence 481	AI521180	dbEST
Sequence 430	AI127556	dbEST	Sequence 482	AI538061	dbEST
Sequence 431	AI129360	dbEST	Sequence 483	AI567204	dbEST
Sequence 432	AI139456	dbEST	Sequence 484	AI587104	dbEST
Sequence 433	AI140291	dbEST	Sequence 485	AI587328	dbEST
Sequence 434	AI144215	dbEST	Sequence 486	AI609624	dbEST
Sequence 435	AI161378	dbEST	Sequence 487	AI610607	dbEST
Sequence 436	AI188638	dbEST	Sequence 488	AI612873	dbEST
Sequence 437	AI215617	dbEST	Sequence 489	AI627444	dbEST
Sequence 438	AI216969	dbEST	Sequence 490	AI632869	dbEST
Sequence 439	AI241578	dbEST	Sequence 491	AI633164	dbEST
Sequence 440	AI250167	dbEST	Sequence 492	AI636014	dbEST
Sequence 441	AI253330	dbEST	Sequence 493	AI637620	dbEST
Sequence 442	AI253335	dbEST	Sequence 494	AI676218	dbEST
Sequence 443	AI253369	dbEST	Sequence 495	AI683871	dbEST
Sequence 444	AI253436	dbEST	Sequence 496	AI684170	dbEST
Sequence 445	AI261671	dbEST	Sequence 497	AI693877	dbEST
Sequence 446	AI262264	dbEST	Sequence 498	AI694088	dbEST
Sequence 447	AI267162	dbEST	Sequence 499	AI732534	dbEST
Sequence 448	AI267379	dbEST	Sequence 500	AI743595	dbEST
Sequence 449	AI267502	dbEST	Sequence 501	AI744489	dbEST
Sequence 450	AI267622	dbEST	Sequence 502	AI745058	dbEST
Sequence 451	AI279131	dbEST	Sequence 503	AI753108	dbEST
Sequence 452	AI285943	dbEST	Sequence 504	AI791322	dbEST
Sequence 453	AI289173	dbEST	Sequence 505	AI798474	dbEST
Sequence 454	AI290876	dbEST	Sequence 506	AI803838	dbEST
Sequence 455	AI292104	dbEST	Sequence 507	AI811960	dbEST
Sequence 456	AI300033	dbEST	Sequence 508	AI813617	dbEST
Sequence 457	AI300074	dbEST	Sequence 509	AI815829	dbEST
Sequence 458	AI312113	dbEST	Sequence 510	AI826957	dbEST
Sequence 459	AI336032	dbEST	Sequence 511	AI831002	dbEST
Sequence 460	AI337069	dbEST	Sequence 512	AI863041	dbEST
Sequence 461	AI340262	dbEST	Sequence 513	AI867294	dbEST
Sequence 462	AI346975	dbEST	Sequence 514	AI912076	dbEST
Sequence 463	AI354639	dbEST	Sequence 515	AI915553	dbEST
Sequence 464	AI366381	dbEST	Sequence 516	AJ001381	ANUC
Sequence 465	AI369024	dbEST	Sequence 517	AJ003401	dbEST
Sequence 466	AI382020	dbEST	Sequence 518	AJ010071	ANUC
Sequence 467	AI400372	dbEST	Sequence 519	AJ132502	ANUC

TABLE 1A

Sequence 520	AL044356	dbEST	Sequence 572	E01197	ANUC
Sequence 521	AL044825	dbEST	Sequence 573	E01198	ANUC
Sequence 522	AL047024	dbEST	Sequence 574	E01630	ANUC
Sequence 523	AL048393	dbEST	Sequence 575	E01954	ANUC
Sequence 524	AL049313	ANUC	Sequence 576	E01971	ANUC
Sequence 525	AL049923	ANUC	Sequence 577	E01972	ANUC
Sequence 526	AL049954	ANUC	Sequence 578	E02628	ANUC
Sequence 527	AL050024	ANUC	Sequence 579	E03569	ANUC
Sequence 528	AL050272	ANUC	Sequence 580	E03879	ANUC
Sequence 529	AL050395	ANUC	Sequence 581	E08663	ANUC
Sequence 530	AL096714	ANUC	Sequence 582	F06593	dbEST
Sequence 531	AL096748	ANUC	Sequence 583	F28779	dbEST
Sequence 532	AL096842	ANUC	Sequence 584	H25806	dbEST
Sequence 533	AL110124	ANUC	Sequence 585	H47546	dbEST
Sequence 534	C17346	dbEST	Sequence 586	H48873	dbEST
Sequence 535	D00017	ANUC	Sequence 587	H66467	dbEST
Sequence 536	D00068	ANUC	Sequence 588	H88415	dbEST
Sequence 537	D11960	dbEST	Sequence 589	J00196	ANUC
Sequence 538	D12502	ANUC	Sequence 590	J03575	ANUC
Sequence 539	D12763	ANUC	Sequence 591	J03858	ANUC
Sequence 540	D13380	ANUC	Sequence 592	J03909	ANUC
Sequence 541	D13645	ANUC	Sequence 593	J04164	ANUC
Sequence 542	D13866	ANUC	Sequence 594	K00422	ANUC
Sequence 543	D14697	ANUC	Sequence 595	K01763	ANUC
Sequence 544	D21260	ANUC	Sequence 596	L00693	ANUC
Sequence 545	D23660	ANUC	Sequence 597	L02426	ANUC
Sequence 546	D26155	ANUC	Sequence 598	L06328	ANUC
Sequence 547	D26599	ANUC	Sequence 599	L09159	ANUC
Sequence 548	D28759	ANUC	Sequence 600	L10413	ANUC
Sequence 549	D29640	ANUC	Sequence 601	L11066	ANUC
Sequence 550	D31763	ANUC	Sequence 602	L20688	ANUC
Sequence 551	D31767	ANUC	Sequence 603	L20941	ANUC
Sequence 552	D31883	ANUC	Sequence 604	L28997	ANUC
Sequence 553	D38524	ANUC	Sequence 605	L38995	ANUC
Sequence 554	D42040	ANUC	Sequence 606	L41490	ANUC
Sequence 555	D45248	ANUC	Sequence 607	M10119	ANUC
Sequence 556	D49396	ANUC	Sequence 608	M13536	ANUC
Sequence 557	D50372	ANUC	Sequence 609	M14328	ANUC
Sequence 558	D50420	ANUC	Sequence 610	M14764	ANUC
Sequence 559	D55653	ANUC	Sequence 611	M15329	ANUC
Sequence 560	D81522	dbEST	Sequence 612	M16660	ANUC
Sequence 561	D83077	ANUC	Sequence 613	M17017	ANUC
Sequence 562	D83767	ANUC	Sequence 614	M18216	ANUC
Sequence 563	D86958	ANUC	Sequence 615	M19723	ANUC
Sequence 564	D86979	ANUC	Sequence 616	M22918	ANUC
Sequence 565	D87666	ANUC	Sequence 617	M23613	ANUC
Sequence 566	D87667	ANUC	Sequence 618	M24194	ANUC
Sequence 567	D87735	ANUC	Sequence 619	M24594	ANUC
Sequence 568	D88532	ANUC	Sequence 620	M26152	ANUC
Sequence 569	D89053	ANUC	Sequence 621	M29540	ANUC
Sequence 570	D90311	ANUC	Sequence 622	M29541	ANUC
Sequence 571	D90453	ANUC	Sequence 623	M29551	ANUC

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Sequence 624	M33146	ANUC	Sequence 676	U07550	ANUC
Sequence 625	M34064	ANUC	Sequence 677	U07857	ANUC
Sequence 626	M34455	ANUC	Sequence 678	U08815	ANUC
Sequence 627	M35198	ANUC	Sequence 679	U09559	ANUC
Sequence 628	M36693	ANUC	Sequence 680	U09847	ANUC
Sequence 629	M37716	ANUC	Sequence 681	U10439	ANUC
Sequence 630	M55268	ANUC	Sequence 682	U14966	ANUC
Sequence 631	M55542	ANUC	Sequence 683	U18321	ANUC
Sequence 632	M55543	ANUC	Sequence 684	U19878	ANUC
Sequence 633	M57567	ANUC	Sequence 685	U23942	ANUC
Sequence 634	M60333	ANUC	Sequence 686	U25789	ANUC
Sequence 635	M61715	ANUC	Sequence 687	U28249	ANUC
Sequence 636	M62831	ANUC	Sequence 688	U28964	ANUC
Sequence 637	M63121	ANUC	Sequence 689	U32500	ANUC
Sequence 638	M63838	ANUC	Sequence 690	U32944	ANUC
Sequence 639	M68520	ANUC	Sequence 691	U33760	ANUC
Sequence 640	M77945	dbEST	Sequence 692	U37230	ANUC
Sequence 641	M80563	ANUC	Sequence 693	U37518	ANUC
Sequence 642	M81757	ANUC	Sequence 694	U38292	ANUC
Sequence 643	M83248	ANUC	Sequence 695	U38784	ANUC
Sequence 644	M83654	ANUC	Sequence 696	U41371	ANUC
Sequence 645	M86553	ANUC	Sequence 697	U41515	ANUC
Sequence 646	M87284	ANUC	Sequence 698	U52513	ANUC
Sequence 647	M87434	ANUC	Sequence 699	U56255	ANUC
Sequence 648	M87503	ANUC	Sequence 700	U57847	ANUC
Sequence 649	M92357	ANUC	Sequence 701	U61083	ANUC
Sequence 650	M96982	ANUC	Sequence 702	U68758	ANUC
Sequence 651	M97501	ANUC	Sequence 703	U73524	ANUC
Sequence 652	M97935	ANUC	Sequence 704	U77085	ANUC
Sequence 653	N36346	dbEST	Sequence 705	U78722	ANUC
Sequence 654	N51262	dbEST	Sequence 706	U79751	ANUC
Sequence 655	N57413	dbEST	Sequence 707	U94586	ANUC
Sequence 656	N78477	dbEST	Sequence 708	V00572	ANUC
Sequence 657	N92060	dbEST	Sequence 709	V00594	ANUC
Sequence 658	Q21065	NUCPATENT	Sequence 710	V04202	NUCPATENT
Sequence 659	Q94780	NUCPATENT	Sequence 711	V17906	NUCPATENT
Sequence 660	R13925	dbEST	Sequence 712	V36078	NUCPATENT
Sequence 661	R51732	dbEST	Sequence 713	V68140	NUCPATENT
Sequence 662	R56461	dbEST	Sequence 714	V86134	NUCPATENT
Sequence 663	R66489	dbEST	Sequence 715	W02908	dbEST
Sequence 664	R75621	dbEST	Sequence 716	W05711	dbEST
Sequence 665	S45630	ANUC	Sequence 717	W07308	dbEST
Sequence 666	S70290	ANUC	Sequence 718	W25547	dbEST
Sequence 667	S75295	ANUC	Sequence 719	W28837	dbEST
Sequence 668	S76638	ANUC	Sequence 720	W37272	dbEST
Sequence 669	T34641	dbEST	Sequence 721	W38644	dbEST
Sequence 670	T50925	NUCPATENT	Sequence 722	W39262	dbEST
Sequence 671	T52715	dbEST	Sequence 723	W39498	dbEST
Sequence 672	T54951	dbEST	Sequence 724	W52254	dbEST
Sequence 673	T70793	dbEST	Sequence 725	W74319	dbEST
Sequence 674	U03886	ANUC	Sequence 726	W77987	dbEST
Sequence 675	U04313	ANUC	Sequence 727	W80480	dbEST

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Sequence 728	X00637	ANUC	Sequence 780	AA028164	dbEST
Sequence 729	X01742	ANUC	Sequence 781	AA035775	dbEST
Sequence 730	X02530	ANUC	Sequence 782	AA037294	dbEST
Sequence 731	X02661	ANUC	Sequence 783	AA039967	dbEST
Sequence 732	X04316	NUCPATENT	Sequence 784	AA045637	dbEST
Sequence 733	X04371	ANUC	Sequence 785	AA046815	dbEST
Sequence 734	X04470	ANUC	Sequence 786	AA046853	dbEST
Sequence 735	X05908	ANUC	Sequence 787	AA047052	dbEST
Sequence 736	X07819	ANUC	Sequence 788	AA047213	dbEST
Sequence 737	X13238	ANUC	Sequence 789	AA057071	dbEST
Sequence 738	X15674	ANUC	Sequence 790	AA058933	dbEST
Sequence 739	X15729	ANUC	Sequence 791	AA064952	dbEST
Sequence 740	X16354	ANUC	Sequence 792	AA075089	dbEST
Sequence 741	X16356	ANUC	Sequence 793	AA076291	dbEST
Sequence 742	X16455	ANUC	Sequence 794	AA078508	dbEST
Sequence 743	X17025	ANUC	Sequence 795	AA080864	dbEST
Sequence 744	X20432	NUCPATENT	Sequence 796	AA083345	dbEST
Sequence 745	X30167	NUCPATENT	Sequence 797	AA083693	dbEST
Sequence 746	X33937	NUCPATENT	Sequence 798	AA085497	dbEST
Sequence 747	X35726	NUCPATENT	Sequence 799	AA086463	dbEST
Sequence 748	X41105	NUCPATENT	Sequence 800	AA093935	dbEST
Sequence 749	X51841	ANUC	Sequence 801	AA100291	dbEST
Sequence 750	X54941	ANUC	Sequence 802	AA101207	dbEST
Sequence 751	X56932	ANUC	Sequence 803	AA102403	dbEST
Sequence 752	X57351	ANUC	Sequence 804	AA111856	dbEST
Sequence 753	X59710	ANUC	Sequence 805	AA115174	dbEST
Sequence 754	X65614	ANUC	Sequence 806	AA122134	dbEST
Sequence 755	X67951	ANUC	Sequence 807	AA122291	dbEST
Sequence 756	X68060	ANUC	Sequence 808	AA125780	dbEST
Sequence 757	X68277	ANUC	Sequence 809	AA127322	dbEST
Sequence 758	X72790	ANUC	Sequence 810	AA130432	dbEST
Sequence 759	X76488	ANUC	Sequence 811	AA131801	dbEST
Sequence 760	X83544	ANUC	Sequence 812	AA132445	dbEST
Sequence 761	X85134	ANUC	Sequence 813	AA134109	dbEST
Sequence 762	X87949	ANUC	Sequence 814	AA135924	dbEST
Sequence 763	X93036	ANUC	Sequence 815	AA136322	dbEST
Sequence 764	X99699	ANUC	Sequence 816	AA143034	dbEST
Sequence 765	X99920	ANUC	Sequence 817	AA150057	dbEST
Sequence 766	Y09267	ANUC	Sequence 818	AA151651	dbEST
Sequence 767	Y13323	ANUC	Sequence 819	AA156335	dbEST
Sequence 768	Y17392	ANUC	Sequence 820	AA157333	dbEST
Sequence 769	Z12830	ANUC	Sequence 821	AA158987	dbEST
Sequence 770	Z36815	ANUC	Sequence 822	AA165439	dbEST
Sequence 771	Z47087	ANUC	Sequence 823	AA165632	dbEST
Sequence 772	Z48570	ANUC	Sequence 824	AA166618	dbEST
Sequence 773	Z71389	ANUC	Sequence 825	AA172067	dbEST
Sequence 774	AA002223	dbEST	Sequence 826	AA173031	dbEST
Sequence 775	AA018843	dbEST	Sequence 827	AA178870	dbEST
Sequence 776	AA021647	dbEST	Sequence 828	AA181874	dbEST
Sequence 777	AA022842	dbEST	Sequence 829	AA195194	dbEST
Sequence 778	AA022965	dbEST	Sequence 830	AA203206	dbEST
Sequence 779	AA024522	dbEST	Sequence 831	AA203289	dbEST

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Sequence 832	AA204768	dbEST	Sequence 884	AA447735	dbEST
Sequence 833	AA206621	dbEST	Sequence 885	AA449054	dbEST
Sequence 834	AA213914	dbEST	Sequence 886	AA449205	dbEST
Sequence 835	AA218919	dbEST	Sequence 887	AA449520	dbEST
Sequence 836	AA224050	dbEST	Sequence 888	AA452273	dbEST
Sequence 837	AA224244	dbEST	Sequence 889	AA455007	dbEST
Sequence 838	AA227596	dbEST	Sequence 890	AA455104	dbEST
Sequence 839	AA229018	dbEST	Sequence 891	AA459527	dbEST
Sequence 840	AA229161	dbEST	Sequence 892	AA460226	dbEST
Sequence 841	AA236445	dbEST	Sequence 893	AA461287	dbEST
Sequence 842	AA236680	dbEST	Sequence 894	AA464526	dbEST
Sequence 843	AA243537	dbEST	Sequence 895	AA468398	dbEST
Sequence 844	AA252436	dbEST	Sequence 896	AA469135	dbEST
Sequence 845	AA252869	dbEST	Sequence 897	AA469453	dbEST
Sequence 846	AA256330	dbEST	Sequence 898	AA470690	dbEST
Sequence 847	AA262700	dbEST	Sequence 899	AA479427	dbEST
Sequence 848	AA278358	dbEST	Sequence 900	AA480336	dbEST
Sequence 849	AA287076	dbEST	Sequence 901	AA483454	dbEST
Sequence 850	AA291551	dbEST	Sequence 902	AA487669	dbEST
Sequence 851	AA293273	dbEST	Sequence 903	AA488423	dbEST
Sequence 852	AA295982	dbEST	Sequence 904	AA488635	dbEST
Sequence 853	AA301675	dbEST	Sequence 905	AA488843	dbEST
Sequence 854	AA301722	dbEST	Sequence 906	AA489772	dbEST
Sequence 855	AA302964	dbEST	Sequence 907	AA503972	dbEST
Sequence 856	AA303199	dbEST	Sequence 908	AA508506	dbEST
Sequence 857	AA304927	dbEST	Sequence 909	AA513550	dbEST
Sequence 858	AA305042	dbEST	Sequence 910	AA513783	dbEST
Sequence 859	AA305635	dbEST	Sequence 911	AA514989	dbEST
Sequence 860	AA315030	dbEST	Sequence 912	AA516400	dbEST
Sequence 861	AA315943	dbEST	Sequence 913	AA520993	dbEST
Sequence 862	AA317144	dbEST	Sequence 914	AA521110	dbEST
Sequence 863	AA326060	dbEST	Sequence 915	AA523639	dbEST
Sequence 864	AA327358	dbEST	Sequence 916	AA523697	dbEST
Sequence 865	AA336387	dbEST	Sequence 917	AA528106	dbEST
Sequence 866	AA346413	dbEST	Sequence 918	AA528190	dbEST
Sequence 867	AA352580	dbEST	Sequence 919	AA528226	dbEST
Sequence 868	AA363162	dbEST	Sequence 920	AA534830	dbEST
Sequence 869	AA375754	dbEST	Sequence 921	AA548722	dbEST
Sequence 870	AA399230	dbEST	Sequence 922	AA551236	dbEST
Sequence 871	AA400249	dbEST	Sequence 923	AA551243	dbEST
Sequence 872	AA401629	dbEST	Sequence 924	AA558778	dbEST
Sequence 873	AA402885	dbEST	Sequence 925	AA563834	dbEST
Sequence 874	AA406401	dbEST	Sequence 926	AA576432	dbEST
Sequence 875	AA421682	dbEST	Sequence 927	AA580069	dbEST
Sequence 876	AA422057	dbEST	Sequence 928	AA580294	dbEST
Sequence 877	AA424445	dbEST	Sequence 929	AA582588	dbEST
Sequence 878	AA424901	dbEST	Sequence 930	AA584304	dbEST
Sequence 879	AA424984	dbEST	Sequence 931	AA588772	dbEST
Sequence 880	AA425182	dbEST	Sequence 932	AA593075	dbEST
Sequence 881	AA428607	dbEST	Sequence 933	AA595585	dbEST
Sequence 882	AA446099	dbEST	Sequence 934	AA601895	dbEST
Sequence 883	AA446403	dbEST	Sequence 935	AA628700	dbEST

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Sequence 936	AA630326	dbEST	Sequence 988	AA902644	dbEST
Sequence 937	AA630642	dbEST	Sequence 989	AA909144	dbEST
Sequence 938	AA631178	dbEST	Sequence 990	AA913281	dbEST
Sequence 939	AA631218	dbEST	Sequence 991	AA916756	dbEST
Sequence 940	AA633550	dbEST	Sequence 992	AA922420	dbEST
Sequence 941	AA634808	dbEST	Sequence 993	AA927283	dbEST
Sequence 942	AA639199	dbEST	Sequence 994	AA933075	dbEST
Sequence 943	AA639791	dbEST	Sequence 995	AA935979	dbEST
Sequence 944	AA644273	dbEST	Sequence 996	AA937947	dbEST
Sequence 945	AA648897	dbEST	Sequence 997	AA948295	dbEST
Sequence 946	AA664732	dbEST	Sequence 998	AA969131	dbEST
Sequence 947	AA677550	dbEST	Sequence 999	AA971881	dbEST
Sequence 948	AA687308	dbEST	Sequence 1000	AA973019	dbEST
Sequence 949	AA705002	dbEST	Sequence 1001	AA988923	dbEST
Sequence 950	AA706685	dbEST	Sequence 1002	AA989465	dbEST
Sequence 951	AA708266	dbEST	Sequence 1003	AA994023	dbEST
Sequence 952	AA713687	dbEST	Sequence 1004	AB002310	ANUC
Sequence 953	AA719618	dbEST	Sequence 1005	AB002330	ANUC
Sequence 954	AA719674	dbEST	Sequence 1006	AB007944	ANUC
Sequence 955	AA720572	dbEST	Sequence 1007	AB012911	ANUC
Sequence 956	AA721752	dbEST	Sequence 1008	AB017019	ANUC
Sequence 957	AA723612	dbEST	Sequence 1009	AB018266	ANUC
Sequence 958	AA730571	dbEST	Sequence 1010	AB018305	ANUC
Sequence 959	AA742282	dbEST	Sequence 1011	AB018347	ANUC
Sequence 960	AA748437	dbEST	Sequence 1012	AB019568	ANUC
Sequence 961	AA749187	dbEST	Sequence 1013	AB023158	ANUC
Sequence 962	AA761602	dbEST	Sequence 1014	AB028976	ANUC
Sequence 963	AA768355	dbEST	Sequence 1015	AB029005	ANUC
Sequence 964	AA769127	dbEST	Sequence 1016	AC28164	PREPATNUC
Sequence 965	AA774030	dbEST	Sequence 1017	AD001528	ANUC
Sequence 966	AA774247	dbEST	Sequence 1018	AF000231	ANUC
Sequence 967	AA779631	dbEST	Sequence 1019	AF006088	ANUC
Sequence 968	AA808747	dbEST	Sequence 1020	AF006516	ANUC
Sequence 969	AA809854	dbEST	Sequence 1021	AF012072	ANUC
Sequence 970	AA810859	dbEST	Sequence 1022	AF026947	ANUC
Sequence 971	AA825673	dbEST	Sequence 1023	AF028832	ANUC
Sequence 972	AA825768	dbEST	Sequence 1024	AF030424	ANUC
Sequence 973	AA826517	dbEST	Sequence 1025	AF031379	ANUC
Sequence 974	AA827331	dbEST	Sequence 1026	AF035287	ANUC
Sequence 975	AA827764	dbEST	Sequence 1027	AF035309	ANUC
Sequence 976	AA829511	dbEST	Sequence 1028	AF038197	ANUC
Sequence 977	AA831603	dbEST	Sequence 1029	AF038404	ANUC
Sequence 978	AA836991	dbEST	Sequence 1030	AF043431	ANUC
Sequence 979	AA837254	dbEST	Sequence 1031	AF044670	ANUC
Sequence 980	AA846480	dbEST	Sequence 1032	AF044958	ANUC
Sequence 981	AA846840	dbEST	Sequence 1033	AF047184	ANUC
Sequence 982	AA853515	dbEST	Sequence 1034	AF052164	ANUC
Sequence 983	AA883212	dbEST	Sequence 1035	AF052496	dbEST
Sequence 984	AA886885	dbEST	Sequence 1036	AF052578	ANUC
Sequence 985	AA889485	dbEST	Sequence 1037	AF054990	ANUC
Sequence 986	AA897461	dbEST	Sequence 1038	AF059524	ANUC
Sequence 987	AA902582	dbEST	Sequence 1039	AF070561	ANUC

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Sequence 1040	AF070626	ANUC	Sequence 1092	AI373032	dbEST
Sequence 1041	AF070655	ANUC	Sequence 1093	AI374954	dbEST
Sequence 1042	AF070674	ANUC	Sequence 1094	AI380539	dbEST
Sequence 1043	AF075040	ANUC	Sequence 1095	AI417583	dbEST
Sequence 1044	AF077030	ANUC	Sequence 1096	AI432644	dbEST
Sequence 1045	AF078847	ANUC	Sequence 1097	AI433157	dbEST
Sequence 1046	AF080246	ANUC	Sequence 1098	AI457792	dbEST
Sequence 1047	AF081282	ANUC	Sequence 1099	AI469112	dbEST
Sequence 1048	AF081484	ANUC	Sequence 1100	AI471114	dbEST
Sequence 1049	AF084523	ANUC	Sequence 1101	AI471534	dbEST
Sequence 1050	AF086163	ANUC	Sequence 1102	AI473927	dbEST
Sequence 1051	AF095791	ANUC	Sequence 1103	AI479305	dbEST
Sequence 1052	AF100756	ANUC	Sequence 1104	AI499243	dbEST
Sequence 1053	AF107406	ANUC	Sequence 1105	AI525796	dbEST
Sequence 1054	AF119297	ANUC	Sequence 1106	AI525843	dbEST
Sequence 1055	AF131858	ANUC	Sequence 1107	AI537677	dbEST
Sequence 1056	AF132940	ANUC	Sequence 1108	AI541029	dbEST
Sequence 1057	AF151857	ANUC	Sequence 1109	AI560129	dbEST
Sequence 1058	AI028733	dbEST	Sequence 1110	AI583108	dbEST
Sequence 1059	AI031901	dbEST	Sequence 1111	AI584068	dbEST
Sequence 1060	AI033739	dbEST	Sequence 1112	AI587208	dbEST
Sequence 1061	AI040324	dbEST	Sequence 1113	AI589867	dbEST
Sequence 1062	AI051172	dbEST	Sequence 1114	AI610676	dbEST
Sequence 1063	AI076805	dbEST	Sequence 1115	AI630362	dbEST
Sequence 1064	AI087005	dbEST	Sequence 1116	AI633006	dbEST
Sequence 1065	AI089913	dbEST	Sequence 1117	AI634443	dbEST
Sequence 1066	AI092007	dbEST	Sequence 1118	AI635096	dbEST
Sequence 1067	AI127326	dbEST	Sequence 1119	AI682105	dbEST
Sequence 1068	AI147251	dbEST	Sequence 1120	AI683338	dbEST
Sequence 1069	AI148933	dbEST	Sequence 1121	AI684800	dbEST
Sequence 1070	AI149846	dbEST	Sequence 1122	AI684991	dbEST
Sequence 1071	AI167855	dbEST	Sequence 1123	AI689369	dbEST
Sequence 1072	AI183965	dbEST	Sequence 1124	AI689617	dbEST
Sequence 1073	AI189258	dbEST	Sequence 1125	AI689883	dbEST
Sequence 1074	AI220148	dbEST	Sequence 1126	AI693745	dbEST
Sequence 1075	AI224374	dbEST	Sequence 1127	AI701001	dbEST
Sequence 1076	AI240095	dbEST	Sequence 1128	AI733038	dbEST
Sequence 1077	AI246677	dbEST	Sequence 1129	AI735638	dbEST
Sequence 1078	AI248538	dbEST	Sequence 1130	AI741506	dbEST
Sequence 1079	AI266582	dbEST	Sequence 1131	AI742722	dbEST
Sequence 1080	AI268864	dbEST	Sequence 1132	AI742738	dbEST
Sequence 1081	AI270183	dbEST	Sequence 1133	AI743552	dbEST
Sequence 1082	AI271795	dbEST	Sequence 1134	AI753784	dbEST
Sequence 1083	AI273008	dbEST	Sequence 1135	AI754296	dbEST
Sequence 1084	AI273841	dbEST	Sequence 1136	AI754652	dbEST
Sequence 1085	AI274756	dbEST	Sequence 1137	AI754732	dbEST
Sequence 1086	AI275528	dbEST	Sequence 1138	AI765975	dbEST
Sequence 1087	AI283096	dbEST	Sequence 1139	AI769970	dbEST
Sequence 1088	AI298059	dbEST	Sequence 1140	AI819225	dbEST
Sequence 1089	AI335653	dbEST	Sequence 1141	AI820563	dbEST
Sequence 1090	AI338977	dbEST	Sequence 1142	AI827818	dbEST
Sequence 1091	AI339946	dbEST	Sequence 1143	AI828682	dbEST

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Sequence 1144	AI830067	dbEST	Sequence 1196	D51497	dbEST
Sequence 1145	AI861989	dbEST	Sequence 1197	D53031	dbEST
Sequence 1146	AI887129	dbEST	Sequence 1198	D62116	dbEST
Sequence 1147	AI887632	dbEST	Sequence 1199	D63878	ANUC
Sequence 1148	AI890281	dbEST	Sequence 1200	D78611	ANUC
Sequence 1149	AI924046	dbEST	Sequence 1201	D82348	ANUC
Sequence 1150	AI924096	dbEST	Sequence 1202	D83032	ANUC
Sequence 1151	AI924823	dbEST	Sequence 1203	D85433	ANUC
Sequence 1152	AI963471	dbEST	Sequence 1204	D87437	ANUC
Sequence 1153	AI963604	dbEST	Sequence 1205	D87667	ANUC
Sequence 1154	AI972556	dbEST	Sequence 1206	D89092	ANUC
Sequence 1155	AI979048	dbEST	Sequence 1207	D90041	ANUC
Sequence 1156	AI984656	dbEST	Sequence 1208	E02628	ANUC
Sequence 1157	AJ010442	ANUC	Sequence 1209	E05732	ANUC
Sequence 1158	AJ132694	ANUC	Sequence 1210	F00551	dbEST
Sequence 1159	AJ224442	ANUC	Sequence 1211	H08920	dbEST
Sequence 1160	AL036299	dbEST	Sequence 1212	H25080	dbEST
Sequence 1161	AL042979	dbEST	Sequence 1213	H30306	dbEST
Sequence 1162	AL047305	dbEST	Sequence 1214	H44647	dbEST
Sequence 1163	AL049247	ANUC	Sequence 1215	H81376	dbEST
Sequence 1164	AL049313	ANUC	Sequence 1216	H93521	dbEST
Sequence 1165	AL049381	ANUC	Sequence 1217	H94496	dbEST
Sequence 1166	AL049932	ANUC	Sequence 1218	J03464	ANUC
Sequence 1167	AL050041	ANUC	Sequence 1219	J03799	ANUC
Sequence 1168	AL050161	ANUC	Sequence 1220	J04027	ANUC
Sequence 1169	AL050265	ANUC	Sequence 1221	J04177	ANUC
Sequence 1170	AL050268	ANUC	Sequence 1222	K01228	ANUC
Sequence 1171	AL050367	ANUC	Sequence 1223	K01566	ANUC
Sequence 1172	AL079286	ANUC	Sequence 1224	L07395	ANUC
Sequence 1173	AL079312	ANUC	Sequence 1225	L09159	ANUC
Sequence 1174	AL079314	ANUC	Sequence 1226	L11315	ANUC
Sequence 1175	AL080113	ANUC	Sequence 1227	L13806	ANUC
Sequence 1176	AL110164	ANUC	Sequence 1228	L15702	ANUC
Sequence 1177	AL117412	ANUC	Sequence 1229	L16510	ANUC
Sequence 1178	AL117612	ANUC	Sequence 1230	L24804	ANUC
Sequence 1179	AL119009	dbEST	Sequence 1231	L25931	ANUC
Sequence 1180	AW014693	dbEST	Sequence 1232	L28809	ANUC
Sequence 1181	AW014985	dbEST	Sequence 1233	M10036	ANUC
Sequence 1182	AW021794	dbEST	Sequence 1234	M10905	ANUC
Sequence 1183	C01521	dbEST	Sequence 1235	M11353	ANUC
Sequence 1184	D01096	ANUC	Sequence 1236	M12267	ANUC
Sequence 1185	D13119	ANUC	Sequence 1237	M13536	ANUC
Sequence 1186	D13627	ANUC	Sequence 1238	M14483	ANUC
Sequence 1187	D13630	ANUC	Sequence 1239	M14630	ANUC
Sequence 1188	D13639	ANUC	Sequence 1240	M17885	ANUC
Sequence 1189	D13665	ANUC	Sequence 1241	M18366	ANUC
Sequence 1190	D14530	ANUC	Sequence 1242	M21575	ANUC
Sequence 1191	D21260	ANUC	Sequence 1243	M23254	ANUC
Sequence 1192	D25278	ANUC	Sequence 1244	M24194	ANUC
Sequence 1193	D26361	ANUC	Sequence 1245	M24486	ANUC
Sequence 1194	D30655	ANUC	Sequence 1246	M26512	ANUC
Sequence 1195	D50310	ANUC	Sequence 1247	M28372	ANUC

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Sequence 1248	M31159	ANUC	Sequence 1300	V84510	NUCPATENT
Sequence 1249	M32220	ANUC	Sequence 1301	W19427	dbEST
Sequence 1250	M36341	ANUC	Sequence 1302	W65357	dbEST
Sequence 1251	M36693	ANUC	Sequence 1303	W75963	dbEST
Sequence 1252	M38690	ANUC	Sequence 1304	W80525	dbEST
Sequence 1253	M58485	ANUC	Sequence 1305	X01630	ANUC
Sequence 1254	M59849	ANUC	Sequence 1306	X04098	ANUC
Sequence 1255	M62831	ANUC	Sequence 1307	X04408	ANUC
Sequence 1256	M64241	ANUC	Sequence 1308	X06700	ANUC
Sequence 1257	M69043	ANUC	Sequence 1309	X14420	ANUC
Sequence 1258	M77142	ANUC	Sequence 1310	X51742	NUCPATENT
Sequence 1259	M77830	ANUC	Sequence 1311	X60111	ANUC
Sequence 1260	M86667	ANUC	Sequence 1312	X69398	ANUC
Sequence 1261	M88108	ANUC	Sequence 1313	X72755	ANUC
Sequence 1262	M93651	ANUC	Sequence 1314	X74979	ANUC
Sequence 1263	M95542	ANUC	Sequence 1315	X76180	ANUC
Sequence 1264	N43970	dbEST	Sequence 1316	X78627	ANUC
Sequence 1265	Q12759	NUCPATENT	Sequence 1317	X79067	ANUC
Sequence 1266	Q14635	NUCPATENT	Sequence 1318	X80910	ANUC
Sequence 1267	R11045	dbEST	Sequence 1319	X87949	ANUC
Sequence 1268	R76376	dbEST	Sequence 1320	Y00052	ANUC
Sequence 1269	R84450	dbEST	Sequence 1321	Y00062	ANUC
Sequence 1270	S74728	ANUC	Sequence 1322	Y00282	ANUC
Sequence 1271	S82081	ANUC	Sequence 1323	Y00503	ANUC
Sequence 1272	T07459	dbEST	Sequence 1324	Y15286	ANUC
Sequence 1273	T19883	NUCPATENT	Sequence 1325	Y17171	ANUC
Sequence 1274	T21168	NUCPATENT	Sequence 1326	Z13009	ANUC
Sequence 1275	T22605	NUCPATENT	Sequence 1327	Z24724	ANUC
Sequence 1276	T37405	NUCPATENT	Sequence 1328	Z29083	ANUC
Sequence 1277	T67129	dbEST	Sequence 1329	Z29331	ANUC
Sequence 1278	T69703	dbEST	Sequence 1330	Z46606	ANUC
Sequence 1279	T78615	dbEST	Sequence 1331	Z48501	ANUC
Sequence 1280	T89937	dbEST	Sequence 1332	AA001460	dbEST
Sequence 1281	U03851	ANUC	Sequence 1333	AA001543	dbEST
Sequence 1282	U12404	ANUC	Sequence 1334	AA001792	dbEST
Sequence 1283	U14967	ANUC	Sequence 1335	AA004925	dbEST
Sequence 1284	U14971	ANUC	Sequence 1336	AA010897	dbEST
Sequence 1285	U20659	ANUC	Sequence 1337	AA017162	dbEST
Sequence 1286	U25789	ANUC	Sequence 1338	AA019019	dbEST
Sequence 1287	U30825	ANUC	Sequence 1339	AA022980	dbEST
Sequence 1288	U47077	ANUC	Sequence 1340	AA024595	dbEST
Sequence 1289	U49844	ANUC	Sequence 1341	AA024940	dbEST
Sequence 1290	U63846	ANUC	Sequence 1342	AA024996	dbEST
Sequence 1291	U65928	ANUC	Sequence 1343	AA025750	dbEST
Sequence 1292	U72516	ANUC	Sequence 1344	AA026598	dbEST
Sequence 1293	U79282	ANUC	Sequence 1345	AA029271	dbEST
Sequence 1294	U90716	ANUC	Sequence 1346	AA029725	dbEST
Sequence 1295	U90904	ANUC	Sequence 1347	AA029930	dbEST
Sequence 1296	U94364	ANUC	Sequence 1348	AA033832	dbEST
Sequence 1297	V20437	NUCPATENT	Sequence 1349	AA035471	dbEST
Sequence 1298	V24305	NUCPATENT	Sequence 1350	AA035616	dbEST
Sequence 1299	V81394	NUCPATENT	Sequence 1351	AA036752	dbEST

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Sequence 1352	AA037377	dbEST	Sequence 1404	AA088693	dbEST
Sequence 1353	AA039778	dbEST	Sequence 1405	AA088783	dbEST
Sequence 1354	AA039948	dbEST	Sequence 1406	AA088829	dbEST
Sequence 1355	AA040688	dbEST	Sequence 1407	AA090106	dbEST
Sequence 1356	AA040820	dbEST	Sequence 1408	AA096032	dbEST
Sequence 1357	AA041259	dbEST	Sequence 1409	AA099819	dbEST
Sequence 1358	AA043477	dbEST	Sequence 1410	AA099923	dbEST
Sequence 1359	AA044209	dbEST	Sequence 1411	AA099976	dbEST
Sequence 1360	AA044233	dbEST	Sequence 1412	AA100764	dbEST
Sequence 1361	AA044791	dbEST	Sequence 1413	AA101010	dbEST
Sequence 1362	AA045054	dbEST	Sequence 1414	AA102013	dbEST
Sequence 1363	AA045147	dbEST	Sequence 1415	AA102564	dbEST
Sequence 1364	AA045768	dbEST	Sequence 1416	AA102830	dbEST
Sequence 1365	AA046848	dbEST	Sequence 1417	AA112186	dbEST
Sequence 1366	AA053021	dbEST	Sequence 1418	AA112645	dbEST
Sequence 1367	AA053316	dbEST	Sequence 1419	AA113305	dbEST
Sequence 1368	AA053919	dbEST	Sequence 1420	AA115218	dbEST
Sequence 1369	AA054069	dbEST	Sequence 1421	AA115315	dbEST
Sequence 1370	AA055479	dbEST	Sequence 1422	AA121656	dbEST
Sequence 1371	AA055591	dbEST	Sequence 1423	AA121718	dbEST
Sequence 1372	AA055637	dbEST	Sequence 1424	AA125809	dbEST
Sequence 1373	AA057243	dbEST	Sequence 1425	AA125939	dbEST
Sequence 1374	AA058712	dbEST	Sequence 1426	AA126452	dbEST
Sequence 1375	AA059128	dbEST	Sequence 1427	AA126718	dbEST
Sequence 1376	AA065169	dbEST	Sequence 1428	AA127436	dbEST
Sequence 1377	AA069850	dbEST	Sequence 1429	AA127666	dbEST
Sequence 1378	AA071167	dbEST	Sequence 1430	AA128063	dbEST
Sequence 1379	AA075158	dbEST	Sequence 1431	AA128636	dbEST
Sequence 1380	AA075515	dbEST	Sequence 1432	AA128641	dbEST
Sequence 1381	AA075663	dbEST	Sequence 1433	AA130778	dbEST
Sequence 1382	AA076397	dbEST	Sequence 1434	AA130982	dbEST
Sequence 1383	AA076421	dbEST	Sequence 1435	AA131827	dbEST
Sequence 1384	AA078387	dbEST	Sequence 1436	AA132056	dbEST
Sequence 1385	AA078570	dbEST	Sequence 1437	AA132163	dbEST
Sequence 1386	AA078872	dbEST	Sequence 1438	AA132574	dbEST
Sequence 1387	AA079480	dbEST	Sequence 1439	AA132992	dbEST
Sequence 1388	AA080889	dbEST	Sequence 1440	AA133351	dbEST
Sequence 1389	AA081073	dbEST	Sequence 1441	AA133474	dbEST
Sequence 1390	AA081608	dbEST	Sequence 1442	AA134460	dbEST
Sequence 1391	AA081834	dbEST	Sequence 1443	AA134527	dbEST
Sequence 1392	AA081917	dbEST	Sequence 1444	AA134589	dbEST
Sequence 1393	AA082258	dbEST	Sequence 1445	AA135696	dbEST
Sequence 1394	AA082441	dbEST	Sequence 1446	AA137017	dbEST
Sequence 1395	AA083270	dbEST	Sequence 1447	AA142941	dbEST
Sequence 1396	AA083345	dbEST	Sequence 1448	AA143001	dbEST
Sequence 1397	AA083522	dbEST	Sequence 1449	AA143074	dbEST
Sequence 1398	AA083573	dbEST	Sequence 1450	AA143746	dbEST
Sequence 1399	AA083638	dbEST	Sequence 1451	AA146900	dbEST
Sequence 1400	AA083774	dbEST	Sequence 1452	AA147200	dbEST
Sequence 1401	AA088318	dbEST	Sequence 1453	AA147247	dbEST
Sequence 1402	AA088344	dbEST	Sequence 1454	AA147781	dbEST
Sequence 1403	AA088351	dbEST	Sequence 1455	AA148027	dbEST

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Sequence 1456	AA148136	dbEST	Sequence 1508	AA191422	dbEST
Sequence 1457	AA149810	dbEST	Sequence 1509	AA192094	dbEST
Sequence 1458	AA150377	dbEST	Sequence 1510	AA193308	dbEST
Sequence 1459	AA150837	dbEST	Sequence 1511	AA194577	dbEST
Sequence 1460	AA150928	dbEST	Sequence 1512	AA195246	dbEST
Sequence 1461	AA151274	dbEST	Sequence 1513	AA195865	dbEST
Sequence 1462	AA151594	dbEST	Sequence 1514	AA196424	dbEST
Sequence 1463	AA151755	dbEST	Sequence 1515	AA196982	dbEST
Sequence 1464	AA152476	dbEST	Sequence 1516	AA203691	dbEST
Sequence 1465	AA155754	dbEST	Sequence 1517	AA204867	dbEST
Sequence 1466	AA156066	dbEST	Sequence 1518	AA206578	dbEST
Sequence 1467	AA157163	dbEST	Sequence 1519	AA206991	dbEST
Sequence 1468	AA157993	dbEST	Sequence 1520	AA209508	dbEST
Sequence 1469	AA158738	dbEST	Sequence 1521	AA216753	dbEST
Sequence 1470	AA159110	dbEST	Sequence 1522	AA219665	dbEST
Sequence 1471	AA159576	dbEST	Sequence 1523	AA223121	dbEST
Sequence 1472	AA161003	dbEST	Sequence 1524	AA223820	dbEST
Sequence 1473	AA161076	dbEST	Sequence 1525	AA224109	dbEST
Sequence 1474	AA161467	dbEST	Sequence 1526	AA224407	dbEST
Sequence 1475	AA164193	dbEST	Sequence 1527	AA227118	dbEST
Sequence 1476	AA164473	dbEST	Sequence 1528	AA229325	dbEST
Sequence 1477	AA164729	dbEST	Sequence 1529	AA229611	dbEST
Sequence 1478	AA164873	dbEST	Sequence 1530	AA232959	dbEST
Sequence 1479	AA165027	dbEST	Sequence 1531	AA233835	dbEST
Sequence 1480	AA165068	dbEST	Sequence 1532	AA233843	dbEST
Sequence 1481	AA165087	dbEST	Sequence 1533	AA234092	dbEST
Sequence 1482	AA165174	dbEST	Sequence 1534	AA234307	dbEST
Sequence 1483	AA165282	dbEST	Sequence 1535	AA236776	dbEST
Sequence 1484	AA165293	dbEST	Sequence 1536	AA242985	dbEST
Sequence 1485	AA165638	dbEST	Sequence 1537	AA243338	dbEST
Sequence 1486	AA166618	dbEST	Sequence 1538	AA244342	dbEST
Sequence 1487	AA167041	dbEST	Sequence 1539	AA249154	dbEST
Sequence 1488	AA167750	dbEST	Sequence 1540	AA255502	dbEST
Sequence 1489	AA171630	dbEST	Sequence 1541	AA256591	dbEST
Sequence 1490	AA173506	dbEST	Sequence 1542	AA261990	dbEST
Sequence 1491	AA174097	dbEST	Sequence 1543	AA262939	dbEST
Sequence 1492	AA179187	dbEST	Sequence 1544	AA278445	dbEST
Sequence 1493	AA180137	dbEST	Sequence 1545	AA278482	dbEST
Sequence 1494	AA180224	dbEST	Sequence 1546	AA278642	dbEST
Sequence 1495	AA180383	dbEST	Sequence 1547	AA278956	dbEST
Sequence 1496	AA181075	dbEST	Sequence 1548	AA279048	dbEST
Sequence 1497	AA181258	dbEST	Sequence 1549	AA280099	dbEST
Sequence 1498	AA181684	dbEST	Sequence 1550	AA280221	dbEST
Sequence 1499	AA182415	dbEST	Sequence 1551	AA280828	dbEST
Sequence 1500	AA182540	dbEST	Sequence 1552	AA282915	dbEST
Sequence 1501	AA186577	dbEST	Sequence 1553	AA284334	dbEST
Sequence 1502	AA187817	dbEST	Sequence 1554	AA284555	dbEST
Sequence 1503	AA188045	dbEST	Sequence 1555	AA284670	dbEST
Sequence 1504	AA188140	dbEST	Sequence 1556	AA284671	dbEST
Sequence 1505	AA188384	dbEST	Sequence 1557	AA284870	dbEST
Sequence 1506	AA188826	dbEST	Sequence 1558	AA284906	dbEST
Sequence 1507	AA190873	dbEST	Sequence 1559	AA285290	dbEST

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Sequence 1560	AA286699	dbEST	Sequence 1612	AA315379	dbEST
Sequence 1561	AA286872	dbEST	Sequence 1613	AA317243	dbEST
Sequence 1562	AA287219	dbEST	Sequence 1614	AA317393	dbEST
Sequence 1563	AA287642	dbEST	Sequence 1615	AA318969	dbEST
Sequence 1564	AA287815	dbEST	Sequence 1616	AA327201	dbEST
Sequence 1565	AA291438	dbEST	Sequence 1617	AA331991	dbEST
Sequence 1566	AA291485	dbEST	Sequence 1618	AA332672	dbEST
Sequence 1567	AA291971	dbEST	Sequence 1619	AA333358	dbEST
Sequence 1568	AA292334	dbEST	Sequence 1620	AA335273	dbEST
Sequence 1569	AA293127	dbEST	Sequence 1621	AA336666	dbEST
Sequence 1570	AA293133	dbEST	Sequence 1622	AA337192	dbEST
Sequence 1571	AA293273	dbEST	Sequence 1623	AA337489	dbEST
Sequence 1572	AA293286	dbEST	Sequence 1624	AA338793	dbEST
Sequence 1573	AA293353	dbEST	Sequence 1625	AA339957	dbEST
Sequence 1574	AA293572	dbEST	Sequence 1626	AA340341	dbEST
Sequence 1575	AA293629	dbEST	Sequence 1627	AA341446	dbEST
Sequence 1576	AA293759	dbEST	Sequence 1628	AA341465	dbEST
Sequence 1577	AA293804	dbEST	Sequence 1629	AA342969	dbEST
Sequence 1578	AA296780	dbEST	Sequence 1630	AA343629	dbEST
Sequence 1579	AA297402	dbEST	Sequence 1631	AA344084	dbEST
Sequence 1580	AA298505	dbEST	Sequence 1632	AA345329	dbEST
Sequence 1581	AA299640	dbEST	Sequence 1633	AA346393	dbEST
Sequence 1582	AA301062	dbEST	Sequence 1634	AA346698	dbEST
Sequence 1583	AA301800	dbEST	Sequence 1635	AA347887	dbEST
Sequence 1584	AA303461	dbEST	Sequence 1636	AA350059	dbEST
Sequence 1585	AA303568	dbEST	Sequence 1637	AA351507	dbEST
Sequence 1586	AA306718	dbEST	Sequence 1638	AA355003	dbEST
Sequence 1587	AA306862	dbEST	Sequence 1639	AA356682	dbEST
Sequence 1588	AA306876	dbEST	Sequence 1640	AA357574	dbEST
Sequence 1589	AA307198	dbEST	Sequence 1641	AA358887	dbEST
Sequence 1590	AA307325	dbEST	Sequence 1642	AA359705	dbEST
Sequence 1591	AA308065	dbEST	Sequence 1643	AA364352	dbEST
Sequence 1592	AA308274	dbEST	Sequence 1644	AA367451	dbEST
Sequence 1593	AA308744	dbEST	Sequence 1645	AA367773	dbEST
Sequence 1594	AA310739	dbEST	Sequence 1646	AA368542	dbEST
Sequence 1595	AA310771	dbEST	Sequence 1647	AA369400	dbEST
Sequence 1596	AA311228	dbEST	Sequence 1648	AA373230	dbEST
Sequence 1597	AA311460	dbEST	Sequence 1649	AA374754	dbEST
Sequence 1598	AA311571	dbEST	Sequence 1650	AA375312	dbEST
Sequence 1599	AA311801	dbEST	Sequence 1651	AA375815	dbEST
Sequence 1600	AA311848	dbEST	Sequence 1652	AA393525	dbEST
Sequence 1601	AA311905	dbEST	Sequence 1653	AA394115	dbEST
Sequence 1602	AA312218	dbEST	Sequence 1654	AA398443	dbEST
Sequence 1603	AA312240	dbEST	Sequence 1655	AA398585	dbEST
Sequence 1604	AA312435	dbEST	Sequence 1656	AA398739	dbEST
Sequence 1605	AA313108	dbEST	Sequence 1657	AA399165	dbEST
Sequence 1606	AA313223	dbEST	Sequence 1658	AA399628	dbEST
Sequence 1607	AA313653	dbEST	Sequence 1659	AA401329	dbEST
Sequence 1608	AA313994	dbEST	Sequence 1660	AA401334	dbEST
Sequence 1609	AA314431	dbEST	Sequence 1661	AA402191	dbEST
Sequence 1610	AA314872	dbEST	Sequence 1662	AA402289	dbEST
Sequence 1611	AA315363	dbEST	Sequence 1663	AA402775	dbEST

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Sequence 1664	AA403319	dbEST	Sequence 1716	AA477567	dbEST
Sequence 1665	AA404613	dbEST	Sequence 1717	AA477973	dbEST
Sequence 1666	AA405124	dbEST	Sequence 1718	AA478230	dbEST
Sequence 1667	AA406239	dbEST	Sequence 1719	AA479646	dbEST
Sequence 1668	AA410580	dbEST	Sequence 1720	AA479648	dbEST
Sequence 1669	AA410982	dbEST	Sequence 1721	AA479848	dbEST
Sequence 1670	AA411021	dbEST	Sequence 1722	AA481078	dbEST
Sequence 1671	AA411252	dbEST	Sequence 1723	AA481710	dbEST
Sequence 1672	AA411764	dbEST	Sequence 1724	AA482430	dbEST
Sequence 1673	AA417794	dbEST	Sequence 1725	AA482432	dbEST
Sequence 1674	AA419263	dbEST	Sequence 1726	AA482779	dbEST
Sequence 1675	AA419284	dbEST	Sequence 1727	AA483258	dbEST
Sequence 1676	AA420751	dbEST	Sequence 1728	AA483726	dbEST
Sequence 1677	AA420758	dbEST	Sequence 1729	AA483858	dbEST
Sequence 1678	AA421248	dbEST	Sequence 1730	AA484181	dbEST
Sequence 1679	AA421682	dbEST	Sequence 1731	AA486047	dbEST
Sequence 1680	AA422060	dbEST	Sequence 1732	AA486859	dbEST
Sequence 1681	AA422143	dbEST	Sequence 1733	AA488141	dbEST
Sequence 1682	AA425004	dbEST	Sequence 1734	AA488385	dbEST
Sequence 1683	AA425468	dbEST	Sequence 1735	AA488517	dbEST
Sequence 1684	AA425737	dbEST	Sequence 1736	AA489323	dbEST
Sequence 1685	AA429794	dbEST	Sequence 1737	AA489380	dbEST
Sequence 1686	AA430400	dbEST	Sequence 1738	AA489382	dbEST
Sequence 1687	AA430436	dbEST	Sequence 1739	AA491204	dbEST
Sequence 1688	AA431428	dbEST	Sequence 1740	AA492143	dbEST
Sequence 1689	AA433988	dbEST	Sequence 1741	AA493371	dbEST
Sequence 1690	AA436315	dbEST	Sequence 1742	AA494321	dbEST
Sequence 1691	AA436411	dbEST	Sequence 1743	AA494552	dbEST
Sequence 1692	AA443024	dbEST	Sequence 1744	AA501657	dbEST
Sequence 1693	AA449394	dbEST	Sequence 1745	AA502136	dbEST
Sequence 1694	AA451779	dbEST	Sequence 1746	AA505780	dbEST
Sequence 1695	AA453878	dbEST	Sequence 1747	AA512933	dbEST
Sequence 1696	AA454668	dbEST	Sequence 1748	AA514395	dbEST
Sequence 1697	AA454953	dbEST	Sequence 1749	AA514974	dbEST
Sequence 1698	AA454962	dbEST	Sequence 1750	AA515143	dbEST
Sequence 1699	AA455245	dbEST	Sequence 1751	AA516376	dbEST
Sequence 1700	AA455785	dbEST	Sequence 1752	AA521006	dbEST
Sequence 1701	AA456454	dbEST	Sequence 1753	AA523522	dbEST
Sequence 1702	AA456557	dbEST	Sequence 1754	AA524748	dbEST
Sequence 1703	AA457255	dbEST	Sequence 1755	AA524950	dbEST
Sequence 1704	AA457579	dbEST	Sequence 1756	AA525141	dbEST
Sequence 1705	AA459167	dbEST	Sequence 1757	AA526028	dbEST
Sequence 1706	AA459210	dbEST	Sequence 1758	AA527275	dbEST
Sequence 1707	AA459527	dbEST	Sequence 1759	AA527557	dbEST
Sequence 1708	AA460570	dbEST	Sequence 1760	AA533506	dbEST
Sequence 1709	AA460816	dbEST	Sequence 1761	AA534349	dbEST
Sequence 1710	AA461005	dbEST	Sequence 1762	AA534586	dbEST
Sequence 1711	AA468657	dbEST	Sequence 1763	AA534608	dbEST
Sequence 1712	AA469447	dbEST	Sequence 1764	AA535496	dbEST
Sequence 1713	AA469453	dbEST	Sequence 1765	AA541651	dbEST
Sequence 1714	AA476522	dbEST	Sequence 1766	AA548056	dbEST
Sequence 1715	AA477018	dbEST	Sequence 1767	AA548600	dbEST

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Sequence 1768	AA550854	dbEST	Sequence 1820	AA630611	dbEST
Sequence 1769	AA550855	dbEST	Sequence 1821	AA631326	dbEST
Sequence 1770	AA551351	dbEST	Sequence 1822	AA633909	dbEST
Sequence 1771	AA551391	dbEST	Sequence 1823	AA634260	dbEST
Sequence 1772	AA554437	dbEST	Sequence 1824	AA634298	dbEST
Sequence 1773	AA554735	dbEST	Sequence 1825	AA640505	dbEST
Sequence 1774	AA555102	dbEST	Sequence 1826	AA641289	dbEST
Sequence 1775	AA564272	dbEST	Sequence 1827	AA644625	dbEST
Sequence 1776	AA564870	dbEST	Sequence 1828	AA648944	dbEST
Sequence 1777	AA565420	dbEST	Sequence 1829	AA651720	dbEST
Sequence 1778	AA568936	dbEST	Sequence 1830	AA652478	dbEST
Sequence 1779	AA569816	dbEST	Sequence 1831	AA652505	dbEST
Sequence 1780	AA569851	dbEST	Sequence 1832	AA653775	dbEST
Sequence 1781	AA569916	dbEST	Sequence 1833	AA658374	dbEST
Sequence 1782	AA573761	dbEST	Sequence 1834	AA663005	dbEST
Sequence 1783	AA573787	dbEST	Sequence 1835	AA669154	dbEST
Sequence 1784	AA577537	dbEST	Sequence 1836	AA677560	dbEST
Sequence 1785	AA578881	dbEST	Sequence 1837	AA677750	dbEST
Sequence 1786	AA579591	dbEST	Sequence 1838	AA678185	dbEST
Sequence 1787	AA579890	dbEST	Sequence 1839	AA678251	dbEST
Sequence 1788	AA580835	dbEST	Sequence 1840	AA687495	dbEST
Sequence 1789	AA582093	dbEST	Sequence 1841	AA703208	dbEST
Sequence 1790	AA582866	dbEST	Sequence 1842	AA703667	dbEST
Sequence 1791	AA583055	dbEST	Sequence 1843	AA703907	dbEST
Sequence 1792	AA583498	dbEST	Sequence 1844	AA704208	dbEST
Sequence 1793	AA583567	dbEST	Sequence 1845	AA706347	dbEST
Sequence 1794	AA583773	dbEST	Sequence 1846	AA714010	dbEST
Sequence 1795	AA584921	dbEST	Sequence 1847	AA715984	dbEST
Sequence 1796	AA586755	dbEST	Sequence 1848	AA716651	dbEST
Sequence 1797	AA587140	dbEST	Sequence 1849	AA719530	dbEST
Sequence 1798	AA587315	dbEST	Sequence 1850	AA721642	dbEST
Sequence 1799	AA587873	dbEST	Sequence 1851	AA729381	dbEST
Sequence 1800	AA593983	dbEST	Sequence 1852	AA731946	dbEST
Sequence 1801	AA594366	dbEST	Sequence 1853	AA736817	dbEST
Sequence 1802	AA595624	dbEST	Sequence 1854	AA742713	dbEST
Sequence 1803	AA595771	dbEST	Sequence 1855	AA743278	dbEST
Sequence 1804	AA599454	dbEST	Sequence 1856	AA744681	dbEST
Sequence 1805	AA600227	dbEST	Sequence 1857	AA745953	dbEST
Sequence 1806	AA600771	dbEST	Sequence 1858	AA759195	dbEST
Sequence 1807	AA601172	dbEST	Sequence 1859	AA767779	dbEST
Sequence 1808	AA602395	dbEST	Sequence 1860	AA769697	dbEST
Sequence 1809	AA602871	dbEST	Sequence 1861	AA773998	dbEST
Sequence 1810	AA603125	dbEST	Sequence 1862	AA775058	dbEST
Sequence 1811	AA603177	dbEST	Sequence 1863	AA776593	dbEST
Sequence 1812	AA604324	dbEST	Sequence 1864	AA777384	dbEST
Sequence 1813	AA604853	dbEST	Sequence 1865	AA778672	dbEST
Sequence 1814	AA610279	dbEST	Sequence 1866	AA779949	dbEST
Sequence 1815	AA610476	dbEST	Sequence 1867	AA781487	dbEST
Sequence 1816	AA610734	dbEST	Sequence 1868	AA788907	dbEST
Sequence 1817	AA614482	dbEST	Sequence 1869	AA806278	dbEST
Sequence 1818	AA628536	dbEST	Sequence 1870	AA806735	dbEST
Sequence 1819	AA628547	dbEST	Sequence 1871	AA808769	dbEST

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Sequence 1872	AA810149	dbEST	Sequence 1924	AB007916	ANUC
Sequence 1873	AA811609	dbEST	Sequence 1925	AB007923	ANUC
Sequence 1874	AA813604	dbEST	Sequence 1926	AB007957	ANUC
Sequence 1875	AA826307	dbEST	Sequence 1927	AB011103	ANUC
Sequence 1876	AA833766	dbEST	Sequence 1928	AB011143	ANUC
Sequence 1877	AA833900	dbEST	Sequence 1929	AB011151	ANUC
Sequence 1878	AA837457	dbEST	Sequence 1930	AB011166	ANUC
Sequence 1879	AA843531	dbEST	Sequence 1931	AB014533	ANUC
Sequence 1880	AA845737	dbEST	Sequence 1932	AB014542	ANUC
Sequence 1881	AA846698	dbEST	Sequence 1933	AB014560	ANUC
Sequence 1882	AA846856	dbEST	Sequence 1934	AB015630	ANUC
Sequence 1883	AA852896	dbEST	Sequence 1935	AB015856	ANUC
Sequence 1884	AA856902	dbEST	Sequence 1936	AB018281	ANUC
Sequence 1885	AA857824	dbEST	Sequence 1937	AB018284	ANUC
Sequence 1886	AA857882	dbEST	Sequence 1938	AB018285	ANUC
Sequence 1887	AA861665	dbEST	Sequence 1939	AB018289	ANUC
Sequence 1888	AA865960	dbEST	Sequence 1940	AB018305	ANUC
Sequence 1889	AA868529	dbEST	Sequence 1941	AB018327	ANUC
Sequence 1890	AA873271	dbEST	Sequence 1942	AB018331	ANUC
Sequence 1891	AA877189	dbEST	Sequence 1943	AB018337	ANUC
Sequence 1892	AA884922	dbEST	Sequence 1944	AB019409	ANUC
Sequence 1893	AA886453	dbEST	Sequence 1945	AB019563	ANUC
Sequence 1894	AA906652	dbEST	Sequence 1946	AB019568	ANUC
Sequence 1895	AA906865	dbEST	Sequence 1947	AB019691	ANUC
Sequence 1896	AA918993	dbEST	Sequence 1948	AB020682	ANUC
Sequence 1897	AA926926	dbEST	Sequence 1949	AB020718	ANUC
Sequence 1898	AA928934	dbEST	Sequence 1950	AB021288	ANUC
Sequence 1899	AA932501	dbEST	Sequence 1951	AB023154	ANUC
Sequence 1900	AA933987	dbEST	Sequence 1952	AB023219	ANUC
Sequence 1901	AA935947	dbEST	Sequence 1953	AB024704	ANUC
Sequence 1902	AA937302	dbEST	Sequence 1954	AB027467	ANUC
Sequence 1903	AA937773	dbEST	Sequence 1955	AB028069	ANUC
Sequence 1904	AA947835	dbEST	Sequence 1956	AB028624	ANUC
Sequence 1905	AA954939	dbEST	Sequence 1957	AB028969	ANUC
Sequence 1906	AA962587	dbEST	Sequence 1958	AB028986	ANUC
Sequence 1907	AA962632	dbEST	Sequence 1959	AB029000	ANUC
Sequence 1908	AA972525	dbEST	Sequence 1960	AB029004	ANUC
Sequence 1909	AA976489	dbEST	Sequence 1961	AB029028	ANUC
Sequence 1910	AA983380	dbEST	Sequence 1962	AC03044	PREPATNUC
Sequence 1911	AA984586	dbEST	Sequence 1963	AC31479	PREPATNUC
Sequence 1912	AA992596	dbEST	Sequence 1964	AF000670	ANUC
Sequence 1913	AB002305	ANUC	Sequence 1965	AF000974	ANUC
Sequence 1914	AB002330	ANUC	Sequence 1966	AF001893	ANUC
Sequence 1915	AB002357	ANUC	Sequence 1967	AF004562	ANUC
Sequence 1916	AB002806	ANUC	Sequence 1968	AF006043	ANUC
Sequence 1917	AB003476	ANUC	Sequence 1969	AF007135	ANUC
Sequence 1918	AB004066	ANUC	Sequence 1970	AF007151	ANUC
Sequence 1919	AB006077	ANUC	Sequence 1971	AF007170	ANUC
Sequence 1920	AB006534	ANUC	Sequence 1972	AF009615	ANUC
Sequence 1921	AB006755	ANUC	Sequence 1973	AF013759	ANUC
Sequence 1922	AB007867	ANUC	Sequence 1974	AF013988	ANUC
Sequence 1923	AB007900	ANUC	Sequence 1975	AF015283	ANUC

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Sequence 1976	AF015767	ANUC	Sequence 2028	AF064019	ANUC
Sequence 1977	AF016507	ANUC	Sequence 2029	AF068235	ANUC
Sequence 1978	AF016582	ANUC	Sequence 2030	AF068846	ANUC
Sequence 1979	AF017790	ANUC	Sequence 2031	AF070523	ANUC
Sequence 1980	AF019767	ANUC	Sequence 2032	AF070537	ANUC
Sequence 1981	AF021351	ANUC	Sequence 2033	AF070555	ANUC
Sequence 1982	AF021819	ANUC	Sequence 2034	AF070561	ANUC
Sequence 1983	AF022229	ANUC	Sequence 2035	AF070596	ANUC
Sequence 1984	AF023266	ANUC	Sequence 2036	AF070600	ANUC
Sequence 1985	AF025439	ANUC	Sequence 2037	AF070626	ANUC
Sequence 1986	AF026166	ANUC	Sequence 2038	AF070649	ANUC
Sequence 1987	AF026939	ANUC	Sequence 2039	AF070662	ANUC
Sequence 1988	AF027205	ANUC	Sequence 2040	AF070672	ANUC
Sequence 1989	AF031385	ANUC	Sequence 2041	AF071202	ANUC
Sequence 1990	AF034607	ANUC	Sequence 2042	AF071219	ANUC
Sequence 1991	AF035286	ANUC	Sequence 2043	AF071593	ANUC
Sequence 1992	AF035309	ANUC	Sequence 2044	AF073298	ANUC
Sequence 1993	AF035313	ANUC	Sequence 2045	AF075587	ANUC
Sequence 1994	AF037204	ANUC	Sequence 2046	AF077030	ANUC
Sequence 1995	AF038661	ANUC	Sequence 2047	AF077045	ANUC
Sequence 1996	AF039019	ANUC	Sequence 2048	AF077200	ANUC
Sequence 1997	AF039291	ANUC	Sequence 2049	AF077202	ANUC
Sequence 1998	AF039843	ANUC	Sequence 2050	AF077207	ANUC
Sequence 1999	AF040990	ANUC	Sequence 2051	AF081192	ANUC
Sequence 2000	AF041483	ANUC	Sequence 2052	AF081484	ANUC
Sequence 2001	AF042385	ANUC	Sequence 2053	AF083190	ANUC
Sequence 2002	AF042729	ANUC	Sequence 2054	AF085355	ANUC
Sequence 2003	AF044588	ANUC	Sequence 2055	AF086003	ANUC
Sequence 2004	AF045184	ANUC	Sequence 2056	AF086116	ANUC
Sequence 2005	AF047438	ANUC	Sequence 2057	AF086178	ANUC
Sequence 2006	AF047472	ANUC	Sequence 2058	AF086205	ANUC
Sequence 2007	AF048977	ANUC	Sequence 2059	AF086207	ANUC
Sequence 2008	AF050171	ANUC	Sequence 2060	AF086336	ANUC
Sequence 2009	AF050199	ANUC	Sequence 2061	AF086517	ANUC
Sequence 2010	AF050639	ANUC	Sequence 2062	AF087135	ANUC
Sequence 2011	AF052124	ANUC	Sequence 2063	AF087990	ANUC
Sequence 2012	AF052135	ANUC	Sequence 2064	AF088036	ANUC
Sequence 2013	AF052149	ANUC	Sequence 2065	AF091076	ANUC
Sequence 2014	AF052164	ANUC	Sequence 2066	AF092563	ANUC
Sequence 2015	AF052169	ANUC	Sequence 2067	AF095287	ANUC
Sequence 2016	AF052180	ANUC	Sequence 2068	AF095791	ANUC
Sequence 2017	AF052514	ANUC	Sequence 2069	AF097709	ANUC
Sequence 2018	AF054183	ANUC	Sequence 2070	AF100741	ANUC
Sequence 2019	AF054187	ANUC	Sequence 2071	AF100756	ANUC
Sequence 2020	AF054840	ANUC	Sequence 2072	AF100928	ANUC
Sequence 2021	AF055012	ANUC	Sequence 2073	AF104222	ANUC
Sequence 2022	AF055033	ANUC	Sequence 2074	AF104913	ANUC
Sequence 2023	AF057299	ANUC	Sequence 2075	AF104923	ANUC
Sequence 2024	AF059252	ANUC	Sequence 2076	AF107405	ANUC
Sequence 2025	AF061258	ANUC	Sequence 2077	AF120334	ANUC
Sequence 2026	AF062318	ANUC	Sequence 2078	AF124438	ANUC
Sequence 2027	AF063611	ANUC	Sequence 2079	AF124439	ANUC

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Sequence 2080	AF125525	ANUC	Sequence 2132	AI091425	dbEST
Sequence 2081	AF131799	ANUC	Sequence 2133	AI092971	dbEST
Sequence 2082	AF131814	ANUC	Sequence 2134	AI095477	dbEST
Sequence 2083	AF139461	ANUC	Sequence 2135	AI123229	dbEST
Sequence 2084	AF139658	ANUC	Sequence 2136	AI125642	dbEST
Sequence 2085	AF144755	ANUC	Sequence 2137	AI125874	dbEST
Sequence 2086	AF147331	ANUC	Sequence 2138	AI127013	dbEST
Sequence 2087	AF150962	ANUC	Sequence 2139	AI127556	dbEST
Sequence 2088	AF151832	ANUC	Sequence 2140	AI140291	dbEST
Sequence 2089	AF151868	ANUC	Sequence 2141	AI141130	dbEST
Sequence 2090	AF151898	ANUC	Sequence 2142	AI141847	dbEST
Sequence 2091	AF151907	ANUC	Sequence 2143	AI143899	dbEST
Sequence 2092	AF152097	ANUC	Sequence 2144	AI144100	dbEST
Sequence 2093	AF159295	ANUC	Sequence 2145	AI148251	dbEST
Sequence 2094	AF176702	ANUC	Sequence 2146	AI149429	dbEST
Sequence 2095	AF190744	ANUC	Sequence 2147	AI149592	dbEST
Sequence 2096	AI004664	dbEST	Sequence 2148	AI186028	dbEST
Sequence 2097	AI004915	dbEST	Sequence 2149	AI186042	dbEST
Sequence 2098	AI016073	dbEST	Sequence 2150	AI190341	dbEST
Sequence 2099	AI016323	dbEST	Sequence 2151	AI192367	dbEST
Sequence 2100	AI016791	dbEST	Sequence 2152	AI192629	dbEST
Sequence 2101	AI018451	dbEST	Sequence 2153	AI198930	dbEST
Sequence 2102	AI018625	dbEST	Sequence 2154	AI216969	dbEST
Sequence 2103	AI022779	dbEST	Sequence 2155	AI217003	dbEST
Sequence 2104	AI023799	dbEST	Sequence 2156	AI223292	dbEST
Sequence 2105	AI026164	dbEST	Sequence 2157	AI241706	dbEST
Sequence 2106	AI027516	dbEST	Sequence 2158	AI251743	dbEST
Sequence 2107	AI031636	dbEST	Sequence 2159	AI252466	dbEST
Sequence 2108	AI033037	dbEST	Sequence 2160	AI253330	dbEST
Sequence 2109	AI034115	dbEST	Sequence 2161	AI253335	dbEST
Sequence 2110	AI037859	dbEST	Sequence 2162	AI253338	dbEST
Sequence 2111	AI041670	dbEST	Sequence 2163	AI253375	dbEST
Sequence 2112	AI042034	dbEST	Sequence 2164	AI253379	dbEST
Sequence 2113	AI042290	dbEST	Sequence 2165	AI253436	dbEST
Sequence 2114	AI051971	dbEST	Sequence 2166	AI262380	dbEST
Sequence 2115	AI056917	dbEST	Sequence 2167	AI263674	dbEST
Sequence 2116	AI057124	dbEST	Sequence 2168	AI267162	dbEST
Sequence 2117	AI066419	dbEST	Sequence 2169	AI267185	dbEST
Sequence 2118	AI078041	dbEST	Sequence 2170	AI267209	dbEST
Sequence 2119	AI081116	dbEST	Sequence 2171	AI267289	dbEST
Sequence 2120	AI081472	dbEST	Sequence 2172	AI267307	dbEST
Sequence 2121	AI081913	dbEST	Sequence 2173	AI267321	dbEST
Sequence 2122	AI082244	dbEST	Sequence 2174	AI267454	dbEST
Sequence 2123	AI082648	dbEST	Sequence 2175	AI267502	dbEST
Sequence 2124	AI084731	dbEST	Sequence 2176	AI268293	dbEST
Sequence 2125	AI085381	dbEST	Sequence 2177	AI269060	dbEST
Sequence 2126	AI087291	dbEST	Sequence 2178	AI269369	dbEST
Sequence 2127	AI087819	dbEST	Sequence 2179	AI270183	dbEST
Sequence 2128	AI088178	dbEST	Sequence 2180	AI270472	dbEST
Sequence 2129	AI089981	dbEST	Sequence 2181	AI271786	dbEST
Sequence 2130	AI090524	dbEST	Sequence 2182	AI272827	dbEST
Sequence 2131	AI090623	dbEST	Sequence 2183	AI274047	dbEST

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Sequence 2184	AI276341	dbEST	Sequence 2236	AI608591	dbEST
Sequence 2185	AI276839	dbEST	Sequence 2237	AI608787	dbEST
Sequence 2186	AI278611	dbEST	Sequence 2238	AI608968	dbEST
Sequence 2187	AI280022	dbEST	Sequence 2239	AI609193	dbEST
Sequence 2188	AI283548	dbEST	Sequence 2240	AI609281	dbEST
Sequence 2189	AI288965	dbEST	Sequence 2241	AI623804	dbEST
Sequence 2190	AI290565	dbEST	Sequence 2242	AI628689	dbEST
Sequence 2191	AI291683	dbEST	Sequence 2243	AI636635	dbEST
Sequence 2192	AI292286	dbEST	Sequence 2244	AI650837	dbEST
Sequence 2193	AI298472	dbEST	Sequence 2245	AI654096	dbEST
Sequence 2194	AI298941	dbEST	Sequence 2246	AI660245	dbEST
Sequence 2195	AI304857	dbEST	Sequence 2247	AI669253	dbEST
Sequence 2196	AI308959	dbEST	Sequence 2248	AI670084	dbEST
Sequence 2197	AI312552	dbEST	Sequence 2249	AI674313	dbEST
Sequence 2198	AI333055	dbEST	Sequence 2250	AI678152	dbEST
Sequence 2199	AI333116	dbEST	Sequence 2251	AI678703	dbEST
Sequence 2200	AI335249	dbEST	Sequence 2252	AI679044	dbEST
Sequence 2201	AI336326	dbEST	Sequence 2253	AI679321	dbEST
Sequence 2202	AI345325	dbEST	Sequence 2254	AI683140	dbEST
Sequence 2203	AI366549	dbEST	Sequence 2255	AI683338	dbEST
Sequence 2204	AI367850	dbEST	Sequence 2256	AI683793	dbEST
Sequence 2205	AI375624	dbEST	Sequence 2257	AI688798	dbEST
Sequence 2206	AI376561	dbEST	Sequence 2258	AI692866	dbEST
Sequence 2207	AI399636	dbEST	Sequence 2259	AI694087	dbEST
Sequence 2208	AI417384	dbEST	Sequence 2260	AI696819	dbEST
Sequence 2209	AI421720	dbEST	Sequence 2261	AI697501	dbEST
Sequence 2210	AI424841	dbEST	Sequence 2262	AI734922	dbEST
Sequence 2211	AI431507	dbEST	Sequence 2263	AI735069	dbEST
Sequence 2212	AI433180	dbEST	Sequence 2264	AI739337	dbEST
Sequence 2213	AI434084	dbEST	Sequence 2265	AI739377	dbEST
Sequence 2214	AI434401	dbEST	Sequence 2266	AI743595	dbEST
Sequence 2215	AI436016	dbEST	Sequence 2267	AI743691	dbEST
Sequence 2216	AI436448	dbEST	Sequence 2268	AI750198	dbEST
Sequence 2217	AI446503	dbEST	Sequence 2269	AI750909	dbEST
Sequence 2218	AI453199	dbEST	Sequence 2270	AI751119	dbEST
Sequence 2219	AI459028	dbEST	Sequence 2271	AI751364	dbEST
Sequence 2220	AI469237	dbEST	Sequence 2272	AI751565	dbEST
Sequence 2221	AI492520	dbEST	Sequence 2273	AI752319	dbEST
Sequence 2222	AI492769	dbEST	Sequence 2274	AI752553	dbEST
Sequence 2223	AI494344	dbEST	Sequence 2275	AI752929	dbEST
Sequence 2224	AI523940	dbEST	Sequence 2276	AI753108	dbEST
Sequence 2225	AI524677	dbEST	Sequence 2277	AI753671	dbEST
Sequence 2226	AI538682	dbEST	Sequence 2278	AI754437	dbEST
Sequence 2227	AI557059	dbEST	Sequence 2279	AI755181	dbEST
Sequence 2228	AI561260	dbEST	Sequence 2280	AI758869	dbEST
Sequence 2229	AI567988	dbEST	Sequence 2281	AI761927	dbEST
Sequence 2230	AI569715	dbEST	Sequence 2282	AI763126	dbEST
Sequence 2231	AI581291	dbEST	Sequence 2283	AI791906	dbEST
Sequence 2232	AI583211	dbEST	Sequence 2284	AI793120	dbEST
Sequence 2233	AI583570	dbEST	Sequence 2285	AI799521	dbEST
Sequence 2234	AI589301	dbEST	Sequence 2286	AI804346	dbEST
Sequence 2235	AI597938	dbEST	Sequence 2287	AI808109	dbEST

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Sequence 2288	AI811021	dbEST	Sequence 2340	AL049999	ANUC
Sequence 2289	AI811845	dbEST	Sequence 2341	AL050011	ANUC
Sequence 2290	AI814139	dbEST	Sequence 2342	AL050089	ANUC
Sequence 2291	AI814674	dbEST	Sequence 2343	AL050141	ANUC
Sequence 2292	AI815868	dbEST	Sequence 2344	AL050171	ANUC
Sequence 2293	AI822030	dbEST	Sequence 2345	AL050187	ANUC
Sequence 2294	AI827641	dbEST	Sequence 2346	AL050198	ANUC
Sequence 2295	AI859619	dbEST	Sequence 2347	AL050217	ANUC
Sequence 2296	AI864580	dbEST	Sequence 2348	AL050392	ANUC
Sequence 2297	AI878968	dbEST	Sequence 2349	AL080062	ANUC
Sequence 2298	AI879179	dbEST	Sequence 2350	AL080186	ANUC
Sequence 2299	AI879367	dbEST	Sequence 2351	AL080235	ANUC
Sequence 2300	AI879992	dbEST	Sequence 2352	AL096857	ANUC
Sequence 2301	AI888377	dbEST	Sequence 2353	AL096858	ANUC
Sequence 2302	AI911704	dbEST	Sequence 2354	AL110197	ANUC
Sequence 2303	AI911997	dbEST	Sequence 2355	AL110235	ANUC
Sequence 2304	AI912084	dbEST	Sequence 2356	AL117237	ANUC
Sequence 2305	AI916284	dbEST	Sequence 2357	AL117499	ANUC
Sequence 2306	AI916584	dbEST	Sequence 2358	AL117534	ANUC
Sequence 2307	AI923224	dbEST	Sequence 2359	AL118999	dbEST
Sequence 2308	AI924096	dbEST	Sequence 2360	AL119085	dbEST
Sequence 2309	AI928185	dbEST	Sequence 2361	AL119157	dbEST
Sequence 2310	AI929819	dbEST	Sequence 2362	AW020479	dbEST
Sequence 2311	AI936748	dbEST	Sequence 2363	AW044114	dbEST
Sequence 2312	AI950087	dbEST	Sequence 2364	AW102841	dbEST
Sequence 2313	AI955808	dbEST	Sequence 2365	C02094	dbEST
Sequence 2314	AJ001258	ANUC	Sequence 2366	C16886	dbEST
Sequence 2315	AJ002030	ANUC	Sequence 2367	C18886	dbEST
Sequence 2316	AJ006026	ANUC	Sequence 2368	D00017	ANUC
Sequence 2317	AJ011001	ANUC	Sequence 2369	D00022	ANUC
Sequence 2318	AJ011915	ANUC	Sequence 2370	D00068	ANUC
Sequence 2319	AJ012499	ANUC	Sequence 2371	D00099	ANUC
Sequence 2320	AJ223183	ANUC	Sequence 2372	D00422	ANUC
Sequence 2321	AL035802	dbEST	Sequence 2373	D10495	ANUC
Sequence 2322	AL035987	dbEST	Sequence 2374	D13119	ANUC
Sequence 2323	AL036801	dbEST	Sequence 2375	D13287	ANUC
Sequence 2324	AL037646	dbEST	Sequence 2376	D13665	ANUC
Sequence 2325	AL038985	dbEST	Sequence 2377	D13866	ANUC
Sequence 2326	AL039150	dbEST	Sequence 2378	D14662	ANUC
Sequence 2327	AL041780	dbEST	Sequence 2379	D14697	ANUC
Sequence 2328	AL044019	dbEST	Sequence 2380	D14710	ANUC
Sequence 2329	AL046804	dbEST	Sequence 2381	D14812	ANUC
Sequence 2330	AL049055	dbEST	Sequence 2382	D15049	ANUC
Sequence 2331	AL049227	ANUC	Sequence 2383	D16431	ANUC
Sequence 2332	AL049229	ANUC	Sequence 2384	D16937	ANUC
Sequence 2333	AL049296	ANUC	Sequence 2385	D17188	ANUC
Sequence 2334	AL049464	ANUC	Sequence 2386	D17268	ANUC
Sequence 2335	AL049953	ANUC	Sequence 2387	D17409	ANUC
Sequence 2336	AL049954	ANUC	Sequence 2388	D17793	ANUC
Sequence 2337	AL049955	ANUC	Sequence 2389	D21063	ANUC
Sequence 2338	AL049959	ANUC	Sequence 2390	D23660	ANUC
Sequence 2339	AL049987	ANUC	Sequence 2391	D25542	ANUC

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Sequence 2392	D28759	ANUC	Sequence 2444	E01813	ANUC
Sequence 2393	D29677	ANUC	Sequence 2445	E01827	ANUC
Sequence 2394	D31767	ANUC	Sequence 2446	E01979	ANUC
Sequence 2395	D31784	ANUC	Sequence 2447	E02628	ANUC
Sequence 2396	D31883	ANUC	Sequence 2448	E02651	ANUC
Sequence 2397	D31890	ANUC	Sequence 2449	E03569	ANUC
Sequence 2398	D37991	ANUC	Sequence 2450	E06721	ANUC
Sequence 2399	D38491	ANUC	Sequence 2451	E07218	ANUC
Sequence 2400	D38583	ANUC	Sequence 2452	F28779	dbEST
Sequence 2401	D43948	ANUC	Sequence 2453	F30276	dbEST
Sequence 2402	D43950	ANUC	Sequence 2454	F31082	dbEST
Sequence 2403	D45248	ANUC	Sequence 2455	H03854	dbEST
Sequence 2404	D45887	ANUC	Sequence 2456	H05412	dbEST
Sequence 2405	D45915	ANUC	Sequence 2457	H08994	dbEST
Sequence 2406	D49489	ANUC	Sequence 2458	H13339	dbEST
Sequence 2407	D49547	ANUC	Sequence 2459	H16426	dbEST
Sequence 2408	D50310	ANUC	Sequence 2460	H39960	dbEST
Sequence 2409	D50371	ANUC	Sequence 2461	H48742	dbEST
Sequence 2410	D55192	dbEST	Sequence 2462	H59372	dbEST
Sequence 2411	D55649	ANUC	Sequence 2463	H60722	dbEST
Sequence 2412	D56120	dbEST	Sequence 2464	H69238	dbEST
Sequence 2413	D59253	ANUC	Sequence 2465	H72481	dbEST
Sequence 2414	D78586	ANUC	Sequence 2466	H75695	dbEST
Sequence 2415	D79826	dbEST	Sequence 2467	H78517	dbEST
Sequence 2416	D79983	ANUC	Sequence 2468	H79084	dbEST
Sequence 2417	D79986	ANUC	Sequence 2469	H84729	dbEST
Sequence 2418	D79997	ANUC	Sequence 2470	H85709	dbEST
Sequence 2419	D80006	ANUC	Sequence 2471	H89654	dbEST
Sequence 2420	D80012	ANUC	Sequence 2472	J00269	ANUC
Sequence 2421	D80087	dbEST	Sequence 2473	J02621	ANUC
Sequence 2422	D80253	dbEST	Sequence 2474	J03005	ANUC
Sequence 2423	D81635	dbEST	Sequence 2475	J03040	ANUC
Sequence 2424	D82128	dbEST	Sequence 2476	J03171	ANUC
Sequence 2425	D82348	ANUC	Sequence 2477	J03191	ANUC
Sequence 2426	D83197	ANUC	Sequence 2478	J03210	ANUC
Sequence 2427	D83327	ANUC	Sequence 2479	J03464	ANUC
Sequence 2428	D83784	ANUC	Sequence 2480	J03473	ANUC
Sequence 2429	D86227	ANUC	Sequence 2481	J03799	ANUC
Sequence 2430	D87437	ANUC	Sequence 2482	J04080	ANUC
Sequence 2431	D87442	ANUC	Sequence 2483	J04164	ANUC
Sequence 2432	D87470	ANUC	Sequence 2484	J04177	ANUC
Sequence 2433	D87666	ANUC	Sequence 2485	J04765	ANUC
Sequence 2434	D87667	ANUC	Sequence 2486	J05013	ANUC
Sequence 2435	D87682	ANUC	Sequence 2487	J05021	ANUC
Sequence 2436	D87735	ANUC	Sequence 2488	J05192	ANUC
Sequence 2437	D87969	ANUC	Sequence 2489	J05633	ANUC
Sequence 2438	D89052	ANUC	Sequence 2490	K00558	ANUC
Sequence 2439	D90226	ANUC	Sequence 2491	K01566	ANUC
Sequence 2440	D90373	ANUC	Sequence 2492	K02765	ANUC
Sequence 2441	E00882	ANUC	Sequence 2493	L00160	ANUC
Sequence 2442	E01650	ANUC	Sequence 2494	L02547	ANUC
Sequence 2443	E01797	ANUC	Sequence 2495	L05092	ANUC

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Sequence 2496	L05186	ANUC	Sequence 2548	M26041	ANUC
Sequence 2497	L07633	ANUC	Sequence 2549	M26152	ANUC
Sequence 2498	L11066	ANUC	Sequence 2550	M26325	ANUC
Sequence 2499	L11932	ANUC	Sequence 2551	M27913	ANUC
Sequence 2500	L12711	ANUC	Sequence 2552	M27971	ANUC
Sequence 2501	L13848	ANUC	Sequence 2553	M28373	ANUC
Sequence 2502	L14599	ANUC	Sequence 2554	M31159	ANUC
Sequence 2503	L19161	ANUC	Sequence 2555	M31212	ANUC
Sequence 2504	L19184	ANUC	Sequence 2556	M31899	ANUC
Sequence 2505	L19597	ANUC	Sequence 2557	M32110	ANUC
Sequence 2506	L20941	ANUC	Sequence 2558	M32790	ANUC
Sequence 2507	L23959	ANUC	Sequence 2559	M32798	ANUC
Sequence 2508	L26081	ANUC	Sequence 2560	M33308	ANUC
Sequence 2509	L27560	ANUC	Sequence 2561	M34064	ANUC
Sequence 2510	L28010	ANUC	Sequence 2562	M37583	ANUC
Sequence 2511	L28809	ANUC	Sequence 2563	M38106	ANUC
Sequence 2512	L33404	ANUC	Sequence 2564	M55409	ANUC
Sequence 2513	L33930	ANUC	Sequence 2565	M55542	ANUC
Sequence 2514	L34155	ANUC	Sequence 2566	M58485	ANUC
Sequence 2515	L34839	ANUC	Sequence 2567	M60457	ANUC
Sequence 2516	L38486	ANUC	Sequence 2568	M60854	ANUC
Sequence 2517	L42024	ANUC	Sequence 2569	M62403	ANUC
Sequence 2518	L43575	ANUC	Sequence 2570	M62810	ANUC
Sequence 2519	L44349	dbEST	Sequence 2571	M64241	ANUC
Sequence 2520	L54057	ANUC	Sequence 2572	M67468	ANUC
Sequence 2521	M10036	ANUC	Sequence 2573	M69181	ANUC
Sequence 2522	M10119	ANUC	Sequence 2574	M74002	ANUC
Sequence 2523	M10905	ANUC	Sequence 2575	M75126	ANUC
Sequence 2524	M11146	ANUC	Sequence 2576	M76729	ANUC
Sequence 2525	M13573	ANUC	Sequence 2577	M78113	dbEST
Sequence 2526	M13955	ANUC	Sequence 2578	M81757	ANUC
Sequence 2527	M14083	ANUC	Sequence 2579	M83248	ANUC
Sequence 2528	M14483	ANUC	Sequence 2580	M84739	ANUC
Sequence 2529	M14630	ANUC	Sequence 2581	M87503	ANUC
Sequence 2530	M14631	ANUC	Sequence 2582	M88279	ANUC
Sequence 2531	M15182	ANUC	Sequence 2583	M92357	ANUC
Sequence 2532	M15800	ANUC	Sequence 2584	N20576	dbEST
Sequence 2533	M16247	ANUC	Sequence 2585	N34255	dbEST
Sequence 2534	M16553	ANUC	Sequence 2586	N35187	dbEST
Sequence 2535	M16660	ANUC	Sequence 2587	N35421	dbEST
Sequence 2536	M16937	ANUC	Sequence 2588	N39717	dbEST
Sequence 2537	M17597	ANUC	Sequence 2589	N40823	dbEST
Sequence 2538	M17885	ANUC	Sequence 2590	N40852	dbEST
Sequence 2539	M20372	ANUC	Sequence 2591	N67927	dbEST
Sequence 2540	M22146	ANUC	Sequence 2592	N76180	dbEST
Sequence 2541	M22382	ANUC	Sequence 2593	N76677	dbEST
Sequence 2542	M22590	ANUC	Sequence 2594	N77080	dbEST
Sequence 2543	M22918	ANUC	Sequence 2595	N84497	dbEST
Sequence 2544	M22920	ANUC	Sequence 2596	N86776	dbEST
Sequence 2545	M23613	ANUC	Sequence 2597	N91638	dbEST
Sequence 2546	M24194	ANUC	Sequence 2598	N92086	dbEST
Sequence 2547	M25246	ANUC	Sequence 2599	N99205	dbEST

TABLE 1A

Sequence 2600	Q37741	NUCPATENT	Sequence 2652	U22815	ANUC
Sequence 2601	Q48043	NUCPATENT	Sequence 2653	U24105	ANUC
Sequence 2602	Q65676	NUCPATENT	Sequence 2654	U24153	ANUC
Sequence 2603	Q90526	NUCPATENT	Sequence 2655	U27768	ANUC
Sequence 2604	R06046	dbEST	Sequence 2656	U33760	ANUC
Sequence 2605	R17092	dbEST	Sequence 2657	U33833	ANUC
Sequence 2606	R47228	dbEST	Sequence 2658	U34877	ANUC
Sequence 2607	R55150	dbEST	Sequence 2659	U39361	ANUC
Sequence 2608	R55398	dbEST	Sequence 2660	U41515	ANUC
Sequence 2609	R68132	dbEST	Sequence 2661	U46570	ANUC
Sequence 2610	R72676	dbEST	Sequence 2662	U50733	ANUC
Sequence 2611	R73306	dbEST	Sequence 2663	U51586	ANUC
Sequence 2612	R78333	dbEST	Sequence 2664	U56255	ANUC
Sequence 2613	R92367	dbEST	Sequence 2665	U59305	ANUC
Sequence 2614	R93637	dbEST	Sequence 2666	U60975	ANUC
Sequence 2615	R99649	dbEST	Sequence 2667	U61083	ANUC
Sequence 2616	S41458	ANUC	Sequence 2668	U61397	ANUC
Sequence 2617	S42303	ANUC	Sequence 2669	U63846	ANUC
Sequence 2618	S54005	ANUC	Sequence 2670	U67784	ANUC
Sequence 2619	S66431	ANUC	Sequence 2671	U68723	ANUC
Sequence 2620	S70154	ANUC	Sequence 2672	U68727	ANUC
Sequence 2621	S70290	ANUC	Sequence 2673	U68758	ANUC
Sequence 2622	S79895	ANUC	Sequence 2674	U70735	ANUC
Sequence 2623	S82076	ANUC	Sequence 2675	U77085	ANUC
Sequence 2624	T02792	NUCPATENT	Sequence 2676	U79258	ANUC
Sequence 2625	T24119	dbEST	Sequence 2677	U79274	ANUC
Sequence 2626	T49314	dbEST	Sequence 2678	U79278	ANUC
Sequence 2627	T53479	dbEST	Sequence 2679	U80213	ANUC
Sequence 2628	T58797	dbEST	Sequence 2680	U81234	ANUC
Sequence 2629	T64560	dbEST	Sequence 2681	U82130	ANUC
Sequence 2630	T66112	NUCPATENT	Sequence 2682	U86602	ANUC
Sequence 2631	T92160	NUCPATENT	Sequence 2683	U87309	ANUC
Sequence 2632	T92396	dbEST	Sequence 2684	U90028	ANUC
Sequence 2633	U00947	ANUC	Sequence 2685	U90441	ANUC
Sequence 2634	U04815	ANUC	Sequence 2686	U90902	ANUC
Sequence 2635	U07151	ANUC	Sequence 2687	U90917	ANUC
Sequence 2636	U07857	ANUC	Sequence 2688	U94831	ANUC
Sequence 2637	U08470	ANUC	Sequence 2689	V00478	ANUC
Sequence 2638	U10323	ANUC	Sequence 2690	V00503	ANUC
Sequence 2639	U10439	ANUC	Sequence 2691	V05728	NUCPATENT
Sequence 2640	U12465	ANUC	Sequence 2692	V11636	NUCPATENT
Sequence 2641	U13665	ANUC	Sequence 2693	V57903	NUCPATENT
Sequence 2642	U13877	ANUC	Sequence 2694	V59662	NUCPATENT
Sequence 2643	U14550	ANUC	Sequence 2695	V59746	NUCPATENT
Sequence 2644	U14966	ANUC	Sequence 2696	V84428	NUCPATENT
Sequence 2645	U15008	ANUC	Sequence 2697	V86232	NUCPATENT
Sequence 2646	U16306	ANUC	Sequence 2698	V87930	NUCPATENT
Sequence 2647	U17104	ANUC	Sequence 2699	W07215	dbEST
Sequence 2648	U17496	ANUC	Sequence 2700	W19127	dbEST
Sequence 2649	U19769	ANUC	Sequence 2701	W19407	dbEST
Sequence 2650	U20896	ANUC	Sequence 2702	W19441	dbEST
Sequence 2651	U22431	ANUC	Sequence 2703	W25547	dbEST

TABLE 1A

Sequence 2704	W26197	dbEST	Sequence 2756	X73902	ANUC
Sequence 2705	W38952	dbEST	Sequence 2757	X74039	ANUC
Sequence 2706	W56388	dbEST	Sequence 2758	X74801	ANUC
Sequence 2707	W68015	dbEST	Sequence 2759	X74979	ANUC
Sequence 2708	W73140	dbEST	Sequence 2760	X76013	ANUC
Sequence 2709	W73168	dbEST	Sequence 2761	X76180	ANUC
Sequence 2710	W76204	dbEST	Sequence 2762	X78627	ANUC
Sequence 2711	W87522	dbEST	Sequence 2763	X81109	ANUC
Sequence 2712	W87891	dbEST	Sequence 2764	X82676	ANUC
Sequence 2713	X00351	ANUC	Sequence 2765	X84939	NUCPATENT
Sequence 2714	X00497	ANUC	Sequence 2766	X85373	ANUC
Sequence 2715	X01742	ANUC	Sequence 2767	X93036	ANUC
Sequence 2716	X01924	NUCPATENT	Sequence 2768	X93207	ANUC
Sequence 2717	X03084	ANUC	Sequence 2769	X94323	ANUC
Sequence 2718	X04098	ANUC	Sequence 2770	X94754	ANUC
Sequence 2719	X04408	ANUC	Sequence 2771	X97324	ANUC
Sequence 2720	X04470	ANUC	Sequence 2772	X99920	ANUC
Sequence 2721	X05276	ANUC	Sequence 2773	Y00503	ANUC
Sequence 2722	X05908	ANUC	Sequence 2774	Y00757	ANUC
Sequence 2723	X06700	ANUC	Sequence 2775	Y00815	ANUC
Sequence 2724	X07819	ANUC	Sequence 2776	Y09188	ANUC
Sequence 2725	X13425	ANUC	Sequence 2777	Y11435	ANUC
Sequence 2726	X14420	ANUC	Sequence 2778	Y12065	ANUC
Sequence 2727	X15729	ANUC	Sequence 2779	Y13247	ANUC
Sequence 2728	X15880	ANUC	Sequence 2780	Y13286	ANUC
Sequence 2729	X16869	ANUC	Sequence 2781	Y15286	ANUC
Sequence 2730	X17206	ANUC	Sequence 2782	Y17114	ANUC
Sequence 2731	X24068	NUCPATENT	Sequence 2783	Z18538	ANUC
Sequence 2732	X37385	NUCPATENT	Sequence 2784	Z18954	ANUC
Sequence 2733	X37509	NUCPATENT	Sequence 2785	Z19054	ANUC
Sequence 2734	X40178	NUCPATENT	Sequence 2786	Z21507	ANUC
Sequence 2735	X51466	ANUC	Sequence 2787	Z26317	ANUC
Sequence 2736	X53505	ANUC	Sequence 2788	Z29093	ANUC
Sequence 2737	X54304	ANUC	Sequence 2789	Z31696	ANUC
Sequence 2738	X54941	ANUC	Sequence 2790	Z32564	ANUC
Sequence 2739	X55110	ANUC	Sequence 2791	Z36531	ANUC
Sequence 2740	X55885	ANUC	Sequence 2792	Z37986	ANUC
Sequence 2741	X56932	ANUC	Sequence 2793	Z46629	ANUC
Sequence 2742	X56998	ANUC	Sequence 2794	Z47087	ANUC
Sequence 2743	X56999	ANUC	Sequence 2795	Z74615	ANUC
Sequence 2744	X57766	ANUC			
Sequence 2745	X62744	ANUC			
Sequence 2746	X63432	ANUC			
Sequence 2747	X66360	ANUC			
Sequence 2748	X67698	ANUC			
Sequence 2749	X68277	ANUC			
Sequence 2750	X68880	ANUC			
Sequence 2751	X69398	ANUC			
Sequence 2752	X69838	ANUC			
Sequence 2753	X70340	ANUC			
Sequence 2754	X71087	ANUC			
Sequence 2755	X73608	ANUC			

TABLE 1A

Sequence 340: found in patent publication W098/39446

AGGCGTNCCTCTGACTGCCCACTCAGTGGCNCACCNNGGAGCTGNTTGGNGCTTGGG
GANCTNAACANTTNCNTCTTTCAAACACTNACTGGC

Sequence 1962: found in patent publication W098/42738

AGGTACCCGCTCTCCTGCTTCAGTAAATCTCCACTCGATCTCAGTGGGTTTCCTGTCCAT
AGGATCCACAAGTTTGACCTGGCGGTGGAGCAAGGGGGCTTCACTAGGGATCATGGTTCC
CCGGTAATCCATGGTCTTGCCAATGTAGCCGGTAATGTGTGTTTCAGCCCTCCCACGACCA
CCCAGTTTCGCTGCCGGATAACTTGAACCACTTTGCCCTGCTTCCCGCATCCTTGCCTT
CTAGGATCTCCACCGTGTCCCCACAGAACAGATACCAAGTCTTCATCAGAGATGGGTCC
ACAACCACTGGGCGCGCNGCTGATCCATGGGGGGTCTTCTCTGTCTGCAACAGAGCC
TGGGGGGCTCATCCATAACGGTATGGGGGGGAGAGTGACCTTGGATGCCAAGGCCAGC
AGGGGCAAGAAAGACCCATGCCTGGAGGTTGNAAGAAAATCCCTTTGCCAGCAAAAACGC
TTGAAACCCCTTNCCTGTCAAGCTTTTCACTTTTCCGNGGCACTTTGGGATTTTA
GCACATTGGGGCCCTTAAGNGTTCCTTCCCC

Sequence 341: found in patent publication W099/039941

CCCTTAGCGNGGTCGCGCCGAGGCACAATTCGATTATTCACANGAAAGGGCAAACGTGT
NNTGTTNGCTGGCAGGAGNAGGTGCATATATACCAGCACTTCAAGTNNGGTATTTCCATT
CAGGACATTTTATCTCTGTGCAAAGACCGGAGTAGAAGCTGATGAGTGGATCAAGATATT
ACGCTGGAATTTGTCACAAATAAGAAAACAGCTCAACCAAGGGGAAGGCACCGATCCGAT
CTCGGTCGTTTCATCTTTAAATAGATCTTTCTTGCCAAGGAATGCTCTGCCCCAGGAGCAA
GGTGAATGCTTCCCTGACGCTGCGATCTGCAGCAGACTNCAAATGAAAACCGACTAAGG
ATTTTCTTTCAAAAACAAATCAGAAGCAGATGCTGATTGGGACCCATATACCACGTTGCT
GACTCACCGTTGCTGCCCTTNCATGGATGTTGCCATCTGCTTGAGAACACTGAAGCAATC
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ACACAAAGGGAAGAGGAAAGGGGT

Sequence 342: found in patent publication W099/18126

CCGCGGTGGCGGCCGCCGGGCAGGTACCTACAGTGACACAGATCCCCTCCCGCCATCCT
GGTCACACTGAATAACAAAGGGAAGAGAGGAGTAAGAACTGTAGTATCTAGAAATTCTCA
GCACAGTGAAGGAAAGTGATCTTCTACTTTGTATTTCAGGCCTAAAAAAGGAGGGGACGGG
CCCGGCACAGTGGCTCACACCTGTAATCCCAGCACTCTGGGAGGCCAAGGAGGGCAGATC
ACCTGAGGTTGGGAGTTTGTAGACCAGCCTGACCAACATGGAGAAACCTGTCTCTACTAA
AAACACAAAATTAGCCAGGCATGGTGGCATGCGCCTATAAACCAAGCTACTCAAGAGGCT
GAGGCAGGAGAATTGCTTGAACCCAGGAGGCAGAGGTTGTGGTGAGCCAAGATCGAGCCA
TCACACTCCAGCCTGGGCAACAAGAGCAAACTCTGTCTCAAAAAAAAAAACAGGAGAGG
AGGGAG

Sequence 1016: found in patent publication W099/38881

CTACTTAGGGCGAATTGGAGCTCCCCGCGGTGGCGGCCGAGGTCAAGCTTCGACCCCGCG
TCCGTGATAAACTACTTTTGGGTTTTATTTTCATTGAGGCACTTTTTTTATTGTTTGAATG
ATTCCGGCTTGTAATATACAGCCTCTACAATGAAATGCAGAAGAGTTTCAATTTTCTAG
ATCTGTTTTTCATTAGAAATATTGACAAATAACACATTGTCAACCTGGATCCTTTGACA
TTTACTTAACTCTGGCATGTTCAAAAAAGTAGAACTCTAAGAGACCATTACCATTTT
TCACAGATGTATAGGGGATGTATTCTAAAACTGACAGAAAAGAGAAATNTGATAGTCAAC
ACTGTTAACTTTTACTGNGTAATTGCCAAATACACTTTTCCAAATTTGTCCCAACAGCC
TNTAAGCCAGCTTTCTCTATATTTATAA

Sequence 1963: found in patent publication W099/46289

AACTGGACAGAGTAAGGGAATTCAGCATCCTCTTCTGCTTGCTCGTGTTACCCACAG
ATCAAACCTCAATTCTAGTTGGGGATGCTGTCTAGCCCCACACCATGACTGAAGCCTTA

TABLE 1A

AGCACTGTTGCGCCTCATGTGCTTTGGATCAGCAACCCCAAGTGGTATTCTACCAGAGCAT
TGTGGGAAAGCAGATGTATAGTCAGGTCCCAACAGCAAATTGTTGGGTGTGAGAGTTCTA
AAGTATAGGGGTGAGGGAAGAGAAGGATATGAACTCCTCTGACCTTAAGCCAGCATTTCAT
TTAACTTTTATGTCTACTTAACAAGAGAACCTGNAGAAAACTACCGTATTCAAGAGATA
ATCAAAATCAGTGTTTTAGCCAGGCGATGACAGAGAAGCACCATTCCCTCACCCTCCATT
TTGTAATGTCTGTAATAAATTTTCAGTGCGTCAGGATGGATGAACCCAAGATCCAGTGAAT
GATTCAGCTGTTCCAAGCCTTACATTTTCCATCATTATCATCCATTCTCATTTCAGTGA
ACCTCTTGCACTATTGTGGTTAATTTTATGTAAAACCAAGTTTATGTTTTTTTTTTAATAT
GTGCCTATGTAATAAAAGTCTACACACTGGCAAAAAAAAAAAAAAAAAAAAAAGTCCTN

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA001066	DBEst	1437265
AA007157	DBEst	1463141
AA010954	DBEst	1472001
AA015792	DBEst	1476959
AA019769	DBEst	1483105
AA019948	DBEst	1483755
AA022925	DBEst	1487005
AA022937	DBEst	1487036
AA024405	DBEst	1489413
AA029750	DBEst	1496068
AA031509	DBEst	1501463
AA033876	DBEst	1505694
AA034237	DBEst	1506265
AA039967	DBEst	1516280
AA040073	DBEst	1516350
AA040122	DBEst	1516400
AA045732	DBEst	1525626
AA045861	DBEst	1525757
AA046835	DBEst	1524734
AA047026	DBEst	1525061
AA047417	DBEst	1525463
AA053486	DBEst	1544124
AA054658	DBEst	1545600
AA055606	DBEst	1547963
AA056113	DBEst	1548469
AA056176	DBEst	1548514
AA056363	DBEst	1548703
AA056431	DBEst	1548771
AA065336	DBEst	1929216
AA069781	DBEst	1577149
AA069784	DBEst	1577152
AA069839	DBEst	1577199
AA069983	DBEst	1577343
AA071255	DBEst	1578610
AA075135	DBEst	1615139
AA081655	DBEst	1623857
AA082245	DBEst	1624304
AA083471	DBEst	1625557
AA083510	DBEst	1625570
AA085862	DBEst	1629449
AA085872	DBEst	1629244
AA085947	DBEst	1629482
AA088770	DBEst	1634335
AA100333	DBEst	1646685
AA100719	DBEst	1647074
AA100793	DBEst	1647210
AA100852	DBEst	1647269
AA101270	DBEst	1647951
AA101561	DBEst	1648449
AA111907	DBEst	1663978
AA112043	DBEst	1664189
AA112308	DBEst	1664577
AA112375	DBEst	1664785
AA113860	DBEst	1667753
AA114120	DBEst	1667996
AA115118	DBEst	1669966
AA115368	DBEst	1670548
AA122286	DBEst	1678525
AA122348	DBEst	1678587
AA126109	DBEst	1685775
AA127105	DBEst	1686466
AA127132	DBEst	1686492
AA127418	DBEst	1686707

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA128305	DBEst	1688355
AA129461	DBEst	1689332
AA130252	DBEst	1691414
AA130547	DBEst	1692100
AA130786	DBEst	1692452
AA131041	DBEst	1692593
AA131065	DBEst	1692555
AA131104	DBEst	1692612
AA131155	DBEst	1692646
AA131160	DBEst	1692668
AA132182	DBEst	1693860
AA132568	DBEst	1694075
AA132598	DBEst	1694087
AA133351	DBEst	1690319
AA133927	DBEst	1690994
AA134105	DBEst	1691317
AA134210	DBEst	1691566
AA135032	DBEst	1696143
AA135919	DBEst	1697105
AA136383	DBEst	1697611
AA136789	DBEst	1697998
AA143609	DBEst	1713177
AA146773	DBEst	1716163
AA147806	DBEst	1717195
AA148160	DBEst	1717542
AA148268	DBEst	1717666
AA148771	DBEst	1721626
AA149056	DBEst	1719347
AA150307	DBEst	1721837
AA151310	DBEst	1719502
AA151775	DBEst	1720675
AA152037	DBEst	1720875
AA152416	DBEst	1718626
AA155853	DBEst	1727471
AA155926	DBEst	1727544
AA157405	DBEst	1729013
AA157725	DBEst	1729350
AA157788	DBEst	1732599
AA158165	DBEst	1732959
AA158171	DBEst	1732965
AA159272	DBEst	1734074
AA160114	DBEst	1734680
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AA161410	DBEst	1735771
AA164405	DBEst	1740715
AA164465	DBEst	1740624
AA165083	DBEst	1740311
AA165629	DBEst	1741662
AA166973	DBEst	1745366
AA171510	DBEst	1750569
AA173031	DBEst	1754310
AA173470	DBEst	1753798
AA173630	DBEst	1753763
AA179462	DBEst	1760830
AA187003	DBEst	1775129
AA187958	DBEst	1774167
AA188591	DBEst	1775616
AA192108	DBEst	1781932
AA199710	DBEst	1795418
AA203224	DBEst	1798950
AA203284	DBEst	1799010
AA205851	DBEst	1801222
AA209431	DBEst	1807445

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA209531	DBEst	1807492
AA214075	DBEst	1812697
AA216612	DBEst	1817292
AA224230	DBEst	1844755
AA224985	DBEst	1846276
AA226502	DBEst	1847857
AA229225	DBEst	1851057
AA232626	DBEst	1855763
AA233843	DBEst	1856920
AA242891	DBEst	1873684
AA250725	DBEst	1885707
AA250982	DBEst	1885943
AA256959	DBEst	1891227
AA259077	DBEst	1894348
AA262440	DBEst	1897800
AA263110	DBEst	1898920
AA283165	DBEst	1926099
AA285260	DBEst	1929570
AA287112	DBEst	1934119
AA292191	DBEst	1940291
AA292334	DBEst	1940314
AA292385	DBEst	1940380
AA292771	DBEst	1941593
AA293273	DBEst	1941423
AA293572	DBEst	1941239
AA295348	DBEst	1947743
AA295485	DBEst	1947839
AA301631	DBEst	1954115
AA304669	DBEst	1957001
AA304961	DBEst	1957288
AA305193	DBEst	1957520
AA305438	DBEst	1957763
AA306542	DBEst	1958871
AA306708	DBEst	1959036
AA306945	DBEst	1959275
AA307239	DBEst	1959567
AA307477	DBEst	1960025
AA307504	DBEst	1959872
AA307697	DBEst	1960187
AA307779	DBEst	1960177
AA308062	DBEst	1960391
AA308801	DBEst	1961131
AA309028	DBEst	1961354
AA309988	DBEst	1962337
AA311006	DBEst	1963405
AA311481	DBEst	1963975
AA312012	DBEst	1964341
AA313684	DBEst	1966083
AA314146	DBEst	1966495
AA315049	DBEst	1967529
AA315308	DBEst	1967637
AA315426	DBEst	1967755
AA316682	DBEst	1969010
AA319958	DBEst	1972449
AA320346	DBEst	1972675
AA320991	DBEst	1973319
AA328544	DBEst	1980860
AA330457	DBEst	1982700
AA338793	DBEst	1991103
AA340069	DBEst	1992307
AA341170	DBEst	1993406
AA342394	DBEst	1994715
AA348250	DBEst	2000486

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA349148	DBEst	2001385
AA351443	DBEst	2003763
AA351880	DBEst	2004198
AA356158	DBEst	2008784
AA356187	DBEst	2008516
AA356195	DBEst	2008524
AA357374	DBEst	2009714
AA367446	DBEst	2019764
AA375236	DBEst	2027555
AA377718	DBEst	2030037
AA380997	DBEst	2033336
AA383917	DBEst	2036256
AA385147	DBEst	2037466
AA389641	DBEst	2042627
AA393164	DBEst	2046134
AA393236	DBEst	2046205
AA394242	DBEst	2047227
AA398732	DBEst	2051854
AA401864	DBEst	2055883
AA410508	DBEst	2069614
AA410580	DBEst	2069686
AA410942	DBEst	2070196
AA411334	DBEst	2068883
AA411599	DBEst	2069132
AA418061	DBEst	2079935
AA418473	DBEst	2080273
AA418970	DBEst	2080798
AA420789	DBEst	2094677
AA421682	DBEst	2100499
AA421850	DBEst	2100809
AA424529	DBEst	2103499
AA428421	DBEst	2112235
AA429754	DBEst	2112972
AA441787	DBEst	2153671
AA451633	DBEst	2165302
AA453309	DBEst	2166978
AA453559	DBEst	2167228
AA453570	DBEst	2167239
AA454871	DBEst	2177647
AA454913	DBEst	2177689
AA456892	DBEst	2179612
AA457048	DBEst	2179768
AA463426	DBEst	2188310
AA465039	DBEst	2189923
AA477173	DBEst	2205857
AA480921	DBEst	2210473
AA484050	DBEst	2212863
AA484756	DBEst	2214141
AA487483	DBEst	2217647
AA489640	DBEst	2219242
AA493886	DBEst	2223727
AA494493	DBEst	2224280
AA496518	DBEst	2229839
AA501749	DBEst	2236716
AA501822	DBEst	2236789
AA501945	DBEst	2236912
AA504490	DBEst	2240650
AA507234	DBEst	2243673
AA513640	DBEst	2252052
AA526227	DBEst	2268296
AA526889	DBEst	2268958
AA527139	DBEst	2269208
AA527188	DBEst	2269257

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA531428	DBEst	2274134
AA532633	DBEst	2276887
AA535471	DBEst	2279724
AA554757	DBEst	2325296
AA565996	DBEst	2337635
AA568217	DBEst	2341271
AA573742	DBEst	2348257
AA573893	DBEst	2348408
AA574237	DBEst	2348752
AA576866	DBEst	2354340
AA579034	DBEst	2357218
AA579816	DBEst	2358000
AA581220	DBEst	2358992
AA581264	DBEst	2359036
AA582093	DBEst	2360771
AA583091	DBEst	2360451
AA584411	DBEst	2369020
AA586776	DBEst	2397590
AA587110	DBEst	2397924
AA587233	DBEst	2398047
AA587700	DBEst	2401875
AA609259	DBEst	2457687
AA609837	DBEst	2458265
AA613907	DBEst	2466041
AA614529	DBEst	2466725
AA618033	DBEst	2505238
AA628487	DBEst	2540874
AA631204	DBEst	2553815
AA631811	DBEst	2554422
AA640901	DBEst	2566151
AA641841	DBEst	2567059
AA642215	DBEst	2567433
AA643602	DBEst	2568820
AA651720	DBEst	2583372
AA664996	DBEst	2619609
AA668297	DBEst	2629796
AA668836	DBEst	2630335
AA675923	DBEst	2775270
AA687833	DBEst	2674739
AA704992	DBEst	2714910
AA732702	DBEst	2753309
AA745241	DBEst	2785227
AA746481	DBEst	2786467
AA758889	DBEst	2806752
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AA772790	DBEst	2825632
AA776709	DBEst	2836043
AA776811	DBEst	2836142
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AA778116	DBEst	2837517
AA779868	DBEst	2839199
AA781343	DBEst	2840674
AA809984	DBEst	2879390
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AA811200	DBEst	2880811
AA825768	DBEst	2899080
AA828073	DBEst	2900436
AA828722	DBEst	2901821
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AA843661	DBEst	2930179
AA876526	DBEst	2985603
AA883255	DBEst	2992785
AA906652	DBEst	3042238

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA917638	DBEst	3057528
AA927734	DBEst	3076554
AA954939	DBEst	3118634
AA962622	DBEst	3134786
AA991285	DBEst	3177774
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AB004047	GenBank	2116654
AB006746	GenBank	3510296
AB007619	GenBank	2465179
AB007860	GenBank	2662080
AB007965	GenBank	3413940
AB011101	GenBank	3043581
AB011169	GenBank	3043717
AB012701	GenBank	6714554
AB014536	GenBank	3327085
AB014565	GenBank	3327143
AB019568	GenBank	3885371
AB020623	GenBank	3985929
AB020629	GenBank	4240129
AB020693	GenBank	4240260
AB021288	GenBank	4038732
AB022663	GenBank	5019617
AB023214	GenBank	4589637
AB023230	GenBank	4589675
AC02059	N/A	N/A
AC03653	N/A	N/A
AC13415	N/A	N/A
AF000982	GenBank	2580549
AF002985	GenBank	2580585
AF005654	GenBank	2337951
AF006086	GenBank	2282037
AF007791	GenBank	3779196
AF013758	GenBank	3046899
AF013988	GenBank	2318114
AF021232	GenBank	3452182
AF026939	GenBank	2612967
AF026941	GenBank	2612970
AF026942	GenBank	2612971
AF026943	GenBank	2612972
AF026944	GenBank	2612973
AF028832	GenBank	3287488
AF030455	GenBank	3169829
AF030514	GenBank	3219692
AF031469	GenBank	4104081
AF033095	GenBank	2645728
AF035286	GenBank	2661038
AF035316	GenBank	2661078
AF037204	GenBank	2906012
AF038451	GenBank	3779225
AF038662	GenBank	3132899
AF038963	GenBank	4405794
AF043431	GenBank	3452280
AF044956	GenBank	5326827
AF045941	GenBank	3893854
AF046997	GenBank	3170363
AF051894	GenBank	3095110
AF052124	GenBank	3360431
AF052578	GenBank	2967847
AF053233	GenBank	2996191
AF054838	GenBank	2997740
AF055012	GenBank	3005735
AF061736	GenBank	4335936
AF061738	GenBank	4335940

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AF064603	GenBank	3152659
AF064854	GenBank	4206066
AF065388	GenBank	3152700
AF067168	GenBank	4894369
AF067174	GenBank	4894381
AF067817	GenBank	3928846
AF070523	GenBank	3764088
AF070561	GenBank	3387928
AF070562	GenBank	3387930
AF070596	GenBank	3387973
AF070664	GenBank	4454703
AF070674	GenBank	3978243
AF077048	GenBank	4689143
AF077051	GenBank	4689149
AF077200	GenBank	4679013
AF077671	GenBank	3386485
AF080246	GenBank	3406799
AF081484	GenBank	3420928
AF083470	GenBank	3719293
AF084523	GenBank	3550342
AF085355	GenBank	5114044
AF086003	GenBank	3483348
AF086080	GenBank	3483425
AF086183	GenBank	3483528
AF086545	GenBank	3483890
AF091263	GenBank	4140646
AF111713	GenBank	5326796
AF118023	GenBank	4836400
AF124438	GenBank	4838431
AF124439	GenBank	4838433
AF131808	GenBank	4406640
AF131820	GenBank	4406655
AF131848	GenBank	4406690
AF132966	GenBank	4680702
AF132968	GenBank	4680706
AF146277	GenBank	4960046
AF147331	GenBank	4761682
AF150100	GenBank	5107187
AF150266	DBEst	5133702
AF151873	GenBank	4929698
AF151877	GenBank	4929706
AF151978	GenBank	5732679
AF167160	GenBank	5733691
AI023413	DBEst	3239819
AI027888	DBEst	3246587
AI031811	DBEst	3250023
AI033687	DBEst	3254640
AI042140	DBEst	3281334
AI075324	DBEst	3399895
AI075876	DBEst	3405054
AI126802	DBEst	3595316
AI127556	DBEst	3596070
AI129360	DBEst	3597874
AI139456	DBEst	3645428
AI140291	DBEst	3647748
AI144215	DBEst	3666024
AI161378	DBEst	3693062
AI188638	DBEst	3739847
AI215617	DBEst	3784658
AI216969	DBEst	3789623
AI241578	DBEst	3836975
AI250167	DBEst	3846696
AI253330	DBEst	3850451

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AI253335	DBEst	3850456
AI253369	DBEst	3850490
AI253436	DBEst	3850391
AI261671	DBEst	3869874
AI262264	DBEst	3870467
AI267162	DBEst	3886329
AI267379	DBEst	3886546
AI267502	DBEst	3886669
AI267622	DBEst	3886789
AI279131	DBEst	3917365
AI285943	DBEst	3924176
AI289173	DBEst	3932437
AI290876	DBEst	3933650
AI292104	DBEst	3934878
AI300033	DBEst	3959379
AI300074	DBEst	3959420
AI312113	DBEst	4017718
AI336032	DBEst	4072959
AI337069	DBEst	4073996
AI340262	DBEst	4077189
AI346975	DBEst	4084181
AI354639	DBEst	4094792
AI366381	DBEst	4126070
AI369024	DBEst	4147777
AI382020	DBEst	4194801
AI400372	DBEst	4243459
AI417973	DBEst	4261477
AI431963	DBEst	4306858
AI453405	DBEst	4281647
AI457157	DBEst	4310026
AI457624	DBEst	4310493
AI459679	DBEst	4312560
AI460010	DBEst	4312891
AI469095	DBEst	4331185
AI469715	DBEst	4331805
AI471539	DBEst	4333629
AI476335	DBEst	4329380
AI479289	DBEst	4372457
AI499285	DBEst	4391267
AI521180	DBEst	4435315
AI538061	DBEst	4452196
AI567204	DBEst	4525656
AI587104	DBEst	4573545
AI587328	DBEst	4573769
AI609624	DBEst	4618791
AI610607	DBEst	4619774
AI612873	DBEst	4622040
AI627444	DBEst	4664244
AI632869	DBEst	4684199
AI633164	DBEst	4684494
AI636014	DBEst	4687344
AI637620	DBEst	4689854
AI676218	DBEst	4876698
AI683871	DBEst	4894053
AI684170	DBEst	4895464
AI693877	DBEst	4971217
AI694088	DBEst	4971428
AI732534	DBEst	5053647
AI743595	DBEst	5111883
AI744489	DBEst	5112777
AI745058	DBEst	5113346
AI753108	DBEst	5131372
AI791322	DBEst	5339038

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AI798474	DBEst	5363946
AI803838	DBEst	5369310
AI811960	DBEst	5398526
AI813617	DBEst	5424832
AI815829	DBEst	5431375
AI826957	DBEst	5447628
AI831002	DBEst	5451673
AI863041	DBEst	5527148
AI867294	DBEst	5540310
AI912076	DBEst	5631931
AI915553	DBEst	5635408
AJ001381	GenBank	2764616
AJ003401	DBEst	2769433
AJ010071	GenBank	3483016
AJ132502	GenBank	5629914
AL044356	DBEst	5432578
AL044825	DBEst	5433037
AL047024	DBEst	5435080
AL048393	DBEst	5936479
AL049313	GenBank	4500086
AL049923	GenBank	4884169
AL049954	GenBank	4884203
AL050024	GenBank	4884093
AL050272	GenBank	4886498
AL050395	GenBank	4914616
AL096714	GenBank	5419847
AL096748	GenBank	5419879
AL096842	GenBank	5524930
AL110124	GenBank	5817017
C17346	DBEst	1572053
D00017	GenBank	219909
D00068	GenBank	220080
D11960	DBEst	2148277
D12502	GenBank	219494
D12763	GenBank	220076
D13380	GenBank	220033
D13645	GenBank	286008
D13866	GenBank	433410
D14697	GenBank	285964
D21260	GenBank	434760
D23660	GenBank	432358
D26155	GenBank	505086
D26599	GenBank	565648
D28759	GenBank	633074
D29640	GenBank	473930
D31763	GenBank	498151
D31767	GenBank	505091
D31883	GenBank	505093
D38524	GenBank	633070
D42040	GenBank	577292
D45248	GenBank	1008914
D49396	GenBank	682747
D50372	GenBank	2605593
D50420	GenBank	2618577
D55653	GenBank	871882
D81522	DBEst	1179399
D83077	GenBank	1304131
D83767	GenBank	1913784
D86958	GenBank	1503989
D86979	GenBank	6634000
D87666	GenBank	1620016
D87667	GenBank	1620019
D87735	GenBank	1620021

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
D88532	GenBank	1661000
D89053	GenBank	4165017
D90311	GenBank	219496
D90453	GenBank	219897
E01197	GenBank	2169456
E01198	GenBank	2169457
E01630	GenBank	2169883
E01954	GenBank	2170202
E01971	GenBank	2170219
E01972	GenBank	2170220
E02628	GenBank	2170856
E03569	GenBank	2171785
E03879	GenBank	2172093
E08663	GenBank	2176776
F06593	DBEst	672186
F28779	DBEst	4814405
H25806	DBEst	894929
H47546	DBEst	923598
H48873	DBEst	988713
H66467	DBEst	1025207
H88415	DBEst	1070675
J00196	GenBank	188242
J03575	GenBank	189737
J03858	GenBank	179439
J03909	GenBank	186264
J04164	GenBank	177801
K00422	GenBank	184322
K01763	GenBank	184316
L00693	GenBank	180228
L02426	GenBank	403455
L06328	GenBank	340200
L09159	GenBank	307374
L10413	GenBank	388755
L11066	GenBank	307322
L20688	GenBank	404044
L20941	GenBank	507251
L28997	GenBank	607027
L38995	GenBank	704415
L41490	GenBank	927064
M10119	GenBank	182517
M13536	GenBank	180248
M14328	GenBank	182113
M14764	GenBank	189204
M15329	GenBank	186277
M16660	GenBank	184420
M17017	GenBank	179579
M18216	GenBank	178690
M19723	GenBank	186726
M22918	GenBank	189019
M23613	GenBank	189271
M24194	GenBank	187701
M24594	GenBank	186262
M26152	GenBank	1160968
M29540	GenBank	180222
M29541	GenBank	189103
M29551	GenBank	180708
M33146	GenBank	181070
M34064	GenBank	416292
M34455	GenBank	185790
M35198	GenBank	9446401
M36693	GenBank	338285
M37716	GenBank	338266
M55268	GenBank	177837

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
M55542	GenBank	183001
M55543	GenBank	829176
M57567	GenBank	178986
M60333	GenBank	188268
M61715	GenBank	340367
M62831	GenBank	182260
M63121	GenBank	339755
M63838	GenBank	184568
M68520	GenBank	180177
M77945	DBEst	273682
M80563	GenBank	179916
M81757	GenBank	337732
M83248	GenBank	189150
M83654	GenBank	179660
M86553	GenBank	179958
M87284	GenBank	338651
M87434	GenBank	338653
M87503	GenBank	184652
M92357	GenBank	306463
M96982	GenBank	338262
M97501	GenBank	180621
M97935	GenBank	2281070
N36346	DBEst	1157488
N51262	DBEst	1192428
N57413	DBEst	1201303
N78477	DBEst	1241178
N92060	DBEst	1264369
Q21065	N/A	N/A
Q94780	N/A	N/A
R13925	DBEst	767001
R51732	DBEst	813634
R56461	DBEst	826567
R66489	DBEst	839127
R75621	DBEst	850303
S45630	GenBank	256398
S70290	GenBank	546602
S75295	GenBank	913392
S76638	GenBank	243420
T34641	DBEst	616739
T50925	DBEst	652785
T52715	DBEst	654575
T54951	DBEst	656812
T70793	DBEst	685314
U03886	GenBank	458225
U04313	GenBank	453368
U07550	GenBank	469170
U07857	GenBank	469048
U08815	GenBank	508722
U09559	GenBank	791184
U09847	GenBank	495565
U10439	GenBank	577169
U14966	GenBank	550012
U18321	GenBank	603763
U19878	GenBank	755465
U23942	GenBank	1698395
U25789	GenBank	808089
U28249	GenBank	897916
U28964	GenBank	899458
U32500	GenBank	1000750
U32944	GenBank	1209060
U33760	GenBank	995823
U37230	GenBank	1574941
U37518	GenBank	1149557

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
U38292	GenBank	1790879
U38784	GenBank	1574947
U41371	GenBank	1173904
U41515	GenBank	1209723
U52513	GenBank	1777781
U56255	GenBank	1399688
U57847	GenBank	1373420
U61083	GenBank	4097430
U68758	GenBank	4097815
U73524	GenBank	1644401
U77085	GenBank	1684789
U78722	GenBank	1699000
U79751	GenBank	2257753
U94586	GenBank	1946691
V00572	GenBank	35434
V00594	GenBank	37120
V04202	N/A	N/A
V17906	N/A	N/A
V36078	N/A	N/A
V68140	N/A	N/A
V86134	N/A	N/A
W02908	DBEst	1274885
W05711	DBEst	1278502
W07308	DBEst	1281506
W25547	DBEst	1303421
W28837	DBEst	1308785
W37272	DBEst	1318866
W38644	DBEst	1320349
W39262	DBEst	1320979
W39498	DBEst	1321206
W52254	DBEst	1349394
W74319	DBEst	1384468
W77987	DBEst	1388521
W80480	DBEst	1391538
X00637	GenBank	32429
X01742	GenBank	35324
X02530	GenBank	33917
X02661	GenBank	23795
X04316	N/A	N/A
X04371	GenBank	23792
X04470	GenBank	28638
X05908	GenBank	34387
X07819	GenBank	35798
X13238	GenBank	1200056
X15674	GenBank	35995
X15729	GenBank	38317
X16354	GenBank	37197
X16356	GenBank	37203
X16455	GenBank	29854
X17025	GenBank	488749
X20432	N/A	N/A
X30167	N/A	N/A
X33937	N/A	N/A
X35726	N/A	N/A
X41105	N/A	N/A
X51841	GenBank	33910
X54941	GenBank	29976
X56932	GenBank	23690
X57351	GenBank	311373
X59710	GenBank	35049
X65614	GenBank	36177
X67951	GenBank	287640
X68060	GenBank	37230

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
X68277	GenBank	29980
X72790	GenBank	311401
X76488	GenBank	434305
X83544	GenBank	1089849
X85134	GenBank	755749
X87949	GenBank	1143491
X93036	GenBank	1085025
X99699	GenBank	1869900
X99920	GenBank	1694827
Y09267	GenBank	1834492
Y13323	GenBank	5042231
Y17392	GenBank	3212109
Z12830	GenBank	551637
Z36815	GenBank	533929
Z47087	GenBank	860989
Z48570	GenBank	695580
Z71389	GenBank	2239127
AA002223	DBEst	1445158
AA018843	DBEst	1482235
AA021647	DBEst	1485308
AA022842	DBEst	1487015
AA022965	DBEst	1487064
AA024522	DBEst	1489238
AA028164	DBEst	1494289
AA035775	DBEst	1507603
AA037294	DBEst	1512438
AA039967	DBEst	1516280
AA045637	DBEst	1525513
AA046815	DBEst	1524920
AA046853	DBEst	1524752
AA047052	DBEst	1524950
AA047213	DBEst	1525113
AA057071	DBEst	1549810
AA058933	DBEst	1551788
AA064952	DBEst	1559216
AA075089	DBEst	1615078
AA076291	DBEst	1616160
AA078508	DBEst	1837982
AA080864	DBEst	1623371
AA083345	DBEst	1625405
AA083693	DBEst	1625753
AA085497	DBEst	1628765
AA086463	DBEst	1629080
AA093935	DBEst	1639528
AA100291	DBEst	1646582
AA101207	DBEst	1647860
AA102403	DBEst	1647188
AA111856	DBEst	1663943
AA115174	DBEst	1670371
AA122134	DBEst	1678255
AA122291	DBEst	1678547
AA125780	DBEst	1685521
AA127322	DBEst	1686638
AA130432	DBEst	1691715
AA131801	DBEst	1693290
AA132445	DBEst	1694012
AA134109	DBEst	1691321
AA135924	DBEst	1697110
AA136322	DBEst	1697597
AA143034	DBEst	1712411
AA150057	DBEst	1721279
AA151651	DBEst	1720206
AA156335	DBEst	1727969

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA157333	DBEst	1728942
AA158987	DBEst	1733823
AA165439	DBEst	1741455
AA165632	DBEst	1741665
AA166618	DBEst	1745207
AA172067	DBEst	1751125
AA173031	DBEst	1754310
AA178870	DBEst	1760393
AA181874	DBEst	1765359
AA195194	DBEst	1784884
AA203206	DBEst	1798916
AA203289	DBEst	1799038
AA204768	DBEst	1802618
AA206621	DBEst	1802009
AA213914	DBEst	1812716
AA218919	DBEst	1832993
AA224050	DBEst	1844591
AA224244	DBEst	1844769
AA227596	DBEst	1849140
AA229018	DBEst	1851983
AA229161	DBEst	1851090
AA236445	DBEst	1858734
AA236680	DBEst	1860973
AA243537	DBEst	1874328
AA252436	DBEst	1887407
AA252869	DBEst	1885537
AA256330	DBEst	1891867
AA262700	DBEst	1898112
AA278358	DBEst	1921666
AA287076	DBEst	1934137
AA291551	DBEst	1939545
AA293273	DBEst	1941423
AA295982	DBEst	1948378
AA301675	DBEst	1954018
AA301722	DBEst	1954065
AA302964	DBEst	1955294
AA303199	DBEst	1955604
AA304927	DBEst	1957254
AA305042	DBEst	1957368
AA305635	DBEst	1957960
AA315030	DBEst	1967520
AA315943	DBEst	1968272
AA317144	DBEst	1969699
AA326060	DBEst	1978315
AA327358	DBEst	1979623
AA336387	DBEst	1988636
AA346413	DBEst	1998651
AA352580	DBEst	2004900
AA363162	DBEst	2015480
AA375754	DBEst	2028074
AA399230	DBEst	2053028
AA400249	DBEst	2054315
AA401629	DBEst	2055827
AA402885	DBEst	2056782
AA406401	DBEst	2064402
AA421682	DBEst	2100499
AA422057	DBEst	2100890
AA424445	DBEst	2103415
AA424901	DBEst	2107006
AA424984	DBEst	2107137
AA425182	DBEst	2105974
AA428607	DBEst	2112800
AA446099	DBEst	2158764

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA446403	DBEst	2159068
AA447735	DBEst	2161405
AA449054	DBEst	2163074
AA449205	DBEst	2162668
AA449520	DBEst	2163270
AA452273	DBEst	2165942
AA455007	DBEst	2177783
AA455104	DBEst	2177880
AA459527	DBEst	2184434
AA460226	DBEst	2185042
AA461287	DBEst	2186407
AA464526	DBEst	2189410
AA468398	DBEst	2194932
AA469135	DBEst	2195669
AA469453	DBEst	2194248
AA470690	DBEst	2197999
AA479427	DBEst	2207983
AA480336	DBEst	2208487
AA483454	DBEst	2212267
AA487669	DBEst	2217833
AA488423	DBEst	2215854
AA488635	DBEst	2216066
AA488843	DBEst	2218445
AA489772	DBEst	2220656
AA503972	DBEst	2238939
AA508506	DBEst	2246009
AA513550	DBEst	2251962
AA513783	DBEst	2252204
AA514989	DBEst	2254589
AA516400	DBEst	2253762
AA520993	DBEst	2261536
AA521110	DBEst	2261653
AA523639	DBEst	2264567
AA523697	DBEst	2264625
AA528106	DBEst	2270175
AA528190	DBEst	2270259
AA528226	DBEst	2270295
AA534830	DBEst	2279083
AA548722	DBEst	2319004
AA551236	DBEst	2321488
AA551243	DBEst	2321495
AA558778	DBEst	2329255
AA563834	DBEst	2335473
AA576432	DBEst	2353932
AA580069	DBEst	2355396
AA580294	DBEst	2355621
AA582588	DBEst	2359948
AA584304	DBEst	2368913
AA588772	DBEst	2402503
AA593075	DBEst	2408837
AA595585	DBEst	2410935
AA601895	DBEst	2436048
AA628700	DBEst	2541087
AA630326	DBEst	2552937
AA630642	DBEst	2553253
AA631178	DBEst	2553789
AA631218	DBEst	2553829
AA633550	DBEst	2556764
AA634808	DBEst	2558022
AA639199	DBEst	2562978
AA639791	DBEst	2563570
AA644273	DBEst	2569491
AA648897	DBEst	2575326

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA664732	DBEst	2619345
AA677550	DBEst	2658072
AA687308	DBEst	2675499
AA705002	DBEst	2714920
AA706685	DBEst	2716603
AA708266	DBEst	2718184
AA713687	DBEst	2725961
AA719618	DBEst	2732717
AA719674	DBEst	2732773
AA720572	DBEst	2736707
AA721752	DBEst	2737814
AA723612	DBEst	2741319
AA730571	DBEst	2751775
AA742282	DBEst	2784282
AA748437	DBEst	2788395
AA749187	DBEst	2789145
AA761602	DBEst	2810532
AA768355	DBEst	2819370
AA769127	DBEst	2820365
AA774030	DBEst	2825919
AA774247	DBEst	2825545
AA779631	DBEst	2838962
AA808747	DBEst	2878153
AA809854	DBEst	2879260
AA810859	DBEst	2880470
AA825673	DBEst	2898985
AA825768	DBEst	2899080
AA826517	DBEst	2898339
AA827331	DBEst	2899772
AA827764	DBEst	2901323
AA829511	DBEst	2902610
AA831603	DBEst	2904702
AA836991	DBEst	2912190
AA837254	DBEst	2912453
AA846480	DBEst	2932620
AA846840	DBEst	2932980
AA853515	DBEst	2940254
AA883212	DBEst	2992742
AA886885	DBEst	3001993
AA889485	DBEst	3016364
AA897461	DBEst	3034081
AA902582	DBEst	3037705
AA902644	DBEst	3037767
AA909144	DBEst	3048549
AA913281	DBEst	3052673
AA916756	DBEst	3056148
AA922420	DBEst	3069729
AA927283	DBEst	3076180
AA933075	DBEst	3087008
AA935979	DBEst	3093136
AA937947	DBEst	3096058
AA948295	DBEst	3109548
AA969131	DBEst	3144311
AA971881	DBEst	3147171
AA973019	DBEst	3148199
AA988923	DBEst	3174494
AA989465	DBEst	3174829
AA994023	DBEst	3180568
AB002310	GenBank	2224564
AB002330	GenBank	2224604
AB007944	GenBank	3413911
AB012911	GenBank	3062802
AB017019	GenBank	4512256

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AB018266	GenBank	3882166
AB018305	GenBank	3882244
AB018347	GenBank	3882328
AB019568	GenBank	3885371
AB023158	GenBank	4589525
AB028976	GenBank	5689442
AB029005	GenBank	5689500
AC28164	N/A	N/A
AD001528	GenBank	2198556
AF000231	GenBank	2149974
AF006088	GenBank	2282041
AF006516	GenBank	2245670
AF012072	GenBank	2895096
AF026947	GenBank	2736255
AF028832	GenBank	3287488
AF030424	GenBank	2623155
AF031379	GenBank	4894208
AF035287	GenBank	2661040
AF035309	GenBank	2661070
AF038197	GenBank	2795918
AF038404	GenBank	2707904
AF043431	GenBank	3452280
AF044670	GenBank	4191318
AF044958	GenBank	4164447
AF047184	GenBank	2909859
AF052164	GenBank	3360475
AF052496	DBEst	3090893
AF052578	GenBank	2967847
AF054990	GenBank	3005703
AF059524	GenBank	4091867
AF070561	GenBank	3387928
AF070626	GenBank	3283892
AF070655	GenBank	4454685
AF070674	GenBank	3978243
AF075040	GenBank	3377580
AF077030	GenBank	4689107
AF078847	GenBank	5531808
AF080246	GenBank	3406799
AF081282	GenBank	4336324
AF081484	GenBank	3420928
AF084523	GenBank	3550342
AF086163	GenBank	3483508
AF095791	GenBank	3777595
AF100756	GenBank	5410297
AF107406	GenBank	5531905
AF119297	GenBank	4633508
AF131858	GenBank	4406705
AF132940	GenBank	4680650
AF151857	GenBank	4929666
AI028733	DBEst	3246042
AI031901	DBEst	3250113
AI033739	DBEst	3254692
AI040324	DBEst	3279518
AI051172	DBEst	3306706
AI076805	DBEst	3404634
AI087005	DBEst	3425428
AI089913	DBEst	3428972
AI092007	DBEst	3427205
AI127326	DBEst	3595840
AI147251	DBEst	3674933
AI148933	DBEst	3677402
AI149846	DBEst	3678315
AI167855	DBEst	3701025

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AI183965	DBEst	3734603
AI189258	DBEst	3740467
AI220148	DBEst	3802351
AI224374	DBEst	3807087
AI240095	DBEst	3835492
AI246677	DBEst	3842074
AI248538	DBEst	3843935
AI266582	DBEst	3884740
AI268864	DBEst	3888031
AI270183	DBEst	3889350
AI271795	DBEst	3890962
AI273008	DBEst	3895276
AI273841	DBEst	3896109
AI274756	DBEst	3897030
AI275528	DBEst	3897802
AI283096	DBEst	3921329
AI298059	DBEst	3957795
AI335653	DBEst	4072580
AI338977	DBEst	4075904
AI339946	DBEst	4076873
AI373032	DBEst	4152898
AI374954	DBEst	4174944
AI374954	DBEst	4174944
AI380539	DBEst	4190392
AI417583	DBEst	4261087
AI432644	DBEst	4283347
AI433157	DBEst	4287209
AI457792	DBEst	4310661
AI469112	DBEst	4331202
AI471114	DBEst	4333204
AI471534	DBEst	4333624
AI473927	DBEst	4326972
AI479305	DBEst	4372473
AI499243	DBEst	4391225
AI525796	DBEst	4439931
AI525843	DBEst	4439978
AI537677	DBEst	4451812
AI541029	DBEst	4458402
AI560129	DBEst	4510470
AI583108	DBEst	4569005
AI584068	DBEst	4569965
AI587208	DBEst	4573649
AI589867	DBEst	4598915
AI610676	DBEst	4619843
AI630362	DBEst	4681692
AI633006	DBEst	4684336
AI634443	DBEst	4685773
AI635096	DBEst	4686426
AI682105	DBEst	4892287
AI683338	DBEst	4893520
AI684800	DBEst	4896094
AI684991	DBEst	4896285
AI689369	DBEst	4900663
AI689617	DBEst	4900911
AI689883	DBEst	4901177
AI693745	DBEst	4971085
AI701001	DBEst	4988901
AI733038	DBEst	5054151
AI735638	DBEst	5057162
AI741506	DBEst	5109794
AI742722	DBEst	5111010
AI742738	DBEst	5111026
AI743552	DBEst	5111840

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AI753784	DBEst	5132136
AI754296	DBEst	5132560
AI754652	DBEst	5132916
AI754732	DBEst	5132996
AI765975	DBEst	5232484
AI769970	DBEst	5236479
AI819225	DBEst	5438304
AI820563	DBEst	5439642
AI827818	DBEst	5448489
AI828682	DBEst	5449353
AI830067	DBEst	5450738
AI861989	DBEst	5526096
AI887129	DBEst	5592293
AI887632	DBEst	5592796
AI890281	DBEst	5595445
AI924046	DBEst	5660010
AI924096	DBEst	5660060
AI924823	DBEst	5660787
AI963471	DBEst	5756184
AI963604	DBEst	5756382
AI972556	DBEst	5769302
AI979048	DBEst	5804078
AI984656	DBEst	5811933
AJ010442	GenBank	3954884
AJ132694	GenBank	4454210
AJ224442	GenBank	2911586
AL036299	DBEst	5405889
AL042979	DBEst	5422409
AL047305	DBEst	4727252
AL049247	GenBank	4499985
AL049313	GenBank	4500086
AL049381	GenBank	4500168
AL049932	GenBank	4884176
AL050041	GenBank	4884283
AL050161	GenBank	4884375
AL050265	GenBank	4886440
AL050268	GenBank	4886442
AL050367	GenBank	4914600
AL079286	GenBank	5102746
AL079312	GenBank	5102890
AL079314	GenBank	5102893
AL080113	GenBank	5262540
AL110164	GenBank	5817069
AL117412	GenBank	5912102
AL117612	GenBank	5912188
AL119009	DBEst	5924908
AW014693	DBEst	5863450
AW014985	DBEst	5863742
AW021794	DBEst	5875324
C01521	DBEst	1433751
D01096	GenBank	220128
D13119	GenBank	285909
D13627	GenBank	286010
D13630	GenBank	286000
D13639	GenBank	285990
D13665	GenBank	393318
D14530	GenBank	414348
D21260	GenBank	434760
D25278	GenBank	434780
D26361	GenBank	452516
D30655	GenBank	485387
D50310	GenBank	1183161
D51497	DBEst	951733

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
D53031	DBEst	954928
D62116	DBEst	965892
D63878	GenBank	961447
D78611	GenBank	1655421
D82348	GenBank	1311461
D83032	GenBank	1374697
D85433	GenBank	1841371
D87437	GenBank	1665768
D87667	GenBank	1620019
D89092	GenBank	2780747
D90041	GenBank	219413
E02628	GenBank	2170856
E05732	GenBank	2173919
F00551	DBEst	707254
H08920	DBEst	873742
H25080	DBEst	893979
H30306	DBEst	901216
H44647	DBEst	920699
H81376	DBEst	1059465
H93521	DBEst	1099849
H94496	DBEst	1102129
J03464	GenBank	179595
J03799	GenBank	186840
J04027	GenBank	950413
J04177	GenBank	179729
K01228	GenBank	180391
K01566	GenBank	187721
L07395	GenBank	190218
L09159	GenBank	307374
L11315	GenBank	403386
L13806	GenBank	306554
L15702	GenBank	291921
L16510	GenBank	291887
L24804	GenBank	438651
L25931	GenBank	438638
L28809	GenBank	454151
M10036	GenBank	339840
M10905	GenBank	182696
M11353	GenBank	184092
M12267	GenBank	189328
M13536	GenBank	180248
M14483	GenBank	339692
M14630	GenBank	339690
M17885	GenBank	190231
M18366	GenBank	179131
M21575	GenBank	1311702
M23254	GenBank	511636
M24194	GenBank	187701
M24486	GenBank	190785
M26512	GenBank	177796
M28372	GenBank	643575
M31159	GenBank	183115
M32220	GenBank	186619
M36341	GenBank	178984
M36693	GenBank	338285
M38690	GenBank	1048988
M58485	GenBank	180154
M59849	GenBank	182591
M62831	GenBank	182260
M64241	GenBank	190813
M69043	GenBank	187290
M77142	GenBank	339700
M77830	GenBank	4689438

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
M86667	GenBank	189066
M88108	GenBank	189499
M93651	GenBank	338038
M95542	GenBank	184271
N43970	DBEst	1182498
Q12759	N/A	N/A
Q14635	N/A	N/A
R11045	DBEst	763780
R76376	DBEst	851058
R84450	DBEst	942856
S74728	GenBank	797409
S82081	GenBank	1488412
T07459	DBEst	318608
T19883	DBEst	597628
T21168	DBEst	2596291
T22605	DBEst	2597187
T37405	DBEst	621222
T67129	DBEst	676569
T69703	DBEst	680851
T78615	DBEst	697124
T89937	DBEst	718450
U03851	GenBank	433307
U12404	GenBank	531170
U14967	GenBank	550014
U14971	GenBank	550022
U20659	GenBank	929920
U25789	GenBank	808089
U30825	GenBank	1049077
U47077	GenBank	9027566
U49844	GenBank	1235901
U63846	GenBank	1480921
U65928	GenBank	1549382
U72516	GenBank	1673521
U79282	GenBank	1710254
U90716	GenBank	1946350
U90904	GenBank	1913882
U94364	GenBank	2618769
V20437	N/A	N/A
V24305	N/A	N/A
V81394	N/A	N/A
V84510	N/A	N/A
W19427	DBEst	1295328
W65357	DBEst	1373499
W75963	DBEst	1386337
W80525	DBEst	1391689
X01630	GenBank	28871
X04098	GenBank	28338
X04408	GenBank	31914
X06700	GenBank	30053
X14420	GenBank	30057
X51742	GenBank	52697
X60111	GenBank	34768
X69398	GenBank	396175
X72755	GenBank	311375
X74979	GenBank	400462
X76180	GenBank	452649
X78627	GenBank	607129
X79067	GenBank	483524
X80910	GenBank	531475
X87949	GenBank	1143491
Y00052	GenBank	30308
Y00062	GenBank	34275
Y00282	GenBank	36048

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
Y00503	GenBank	34038
Y15286	GenBank	2584788
Y17171	GenBank	3093333
Z13009	GenBank	31072
Z24724	GenBank	505034
Z29083	GenBank	435654
Z29331	GenBank	483539
Z46606	GenBank	575250
Z48501	GenBank	693936
AA001460	DBEst	1436925
AA001543	DBEst	1437008
AA001792	DBEst	1445606
AA004925	DBEst	1448503
AA010897	DBEst	1471994
AA017162	DBEst	1479361
AA019019	DBEst	1482429
AA022980	DBEst	1487079
AA024595	DBEst	1489500
AA024940	DBEst	1489864
AA024996	DBEst	1489901
AA025750	DBEst	1491134
AA026598	DBEst	1492433
AA029271	DBEst	1496712
AA029725	DBEst	1497138
AA029930	DBEst	1496355
AA033832	DBEst	1505650
AA035471	DBEst	1507128
AA035616	DBEst	1507426
AA036752	DBEst	1509790
AA037377	DBEst	1512540
AA039778	DBEst	1516057
AA039948	DBEst	1516243
AA040688	DBEst	1517002
AA040820	DBEst	1517098
AA041259	DBEst	1517683
AA043477	DBEst	1521333
AA044209	DBEst	1522066
AA044233	DBEst	1522109
AA044791	DBEst	1522994
AA045054	DBEst	1523256
AA045147	DBEst	1523487
AA045768	DBEst	1525870
AA046848	DBEst	1524747
AA053021	DBEst	1544277
AA053316	DBEst	1545775
AA053919	DBEst	1544863
AA054069	DBEst	1545012
AA055479	DBEst	1547884
AA055591	DBEst	1547956
AA055637	DBEst	1547976
AA057243	DBEst	1550096
AA058712	DBEst	1551520
AA059128	DBEst	1552146
AA065169	DBEst	1559064
AA069850	DBEst	1577210
AA071167	DBEst	1578528
AA075158	DBEst	1615214
AA075515	DBEst	1615385
AA075663	DBEst	1615533
AA076397	DBEst	1616448
AA076421	DBEst	1616290
AA078387	DBEst	1837861
AA078570	DBEst	1838051

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA078872	DBEst	1617825
AA079480	DBEst	1618390
AA080889	DBEst	1623378
AA081073	DBEst	1622991
AA081608	DBEst	1623666
AA081834	DBEst	1623893
AA081917	DBEst	1623975
AA082258	DBEst	1624341
AA082441	DBEst	1624498
AA083270	DBEst	1625391
AA083345	DBEst	1625405
AA083522	DBEst	1625582
AA083573	DBEst	1625633
AA083638	DBEst	1625697
AA083774	DBEst	1625832
AA088318	DBEst	1633822
AA088344	DBEst	1633856
AA088351	DBEst	1633889
AA088693	DBEst	1634214
AA088783	DBEst	1634295
AA088829	DBEst	1634323
AA090106	DBEst	1636590
AA096032	DBEst	1641617
AA099819	DBEst	1645918
AA099923	DBEst	1646071
AA099976	DBEst	1646109
AA100764	DBEst	1647117
AA101010	DBEst	1647531
AA102013	DBEst	1645759
AA102564	DBEst	1647756
AA102830	DBEst	1648675
AA112186	DBEst	1664473
AA112645	DBEst	1665346
AA113305	DBEst	1665010
AA115218	DBEst	1670047
AA115315	DBEst	1670632
AA121656	DBEst	1679269
AA121718	DBEst	1679447
AA125809	DBEst	1688020
AA125939	DBEst	1687931
AA126452	DBEst	1686119
AA126718	DBEst	1686236
AA127436	DBEst	1686832
AA127666	DBEst	1686935
AA128063	DBEst	1687342
AA128636	DBEst	1688579
AA128641	DBEst	1688584
AA130778	DBEst	1692444
AA130982	DBEst	1692473
AA131827	DBEst	1693380
AA132056	DBEst	1693545
AA132163	DBEst	1693672
AA132574	DBEst	1694081
AA132992	DBEst	1694561
AA133351	DBEst	1690319
AA133474	DBEst	1690442
AA134460	DBEst	1692042
AA134527	DBEst	1692092
AA134589	DBEst	1695586
AA135696	DBEst	1696707
AA137017	DBEst	1698226
AA142941	DBEst	1712319
AA143001	DBEst	1712506

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA143074	DBEst	1712578
AA143746	DBEst	1713134
AA146900	DBEst	1716290
AA147200	DBEst	1716573
AA147247	DBEst	1716883
AA147781	DBEst	1717161
AA148027	DBEst	1717451
AA148136	DBEst	1717510
AA149810	DBEst	1720917
AA150377	DBEst	1721908
AA150837	DBEst	1722412
AA150928	DBEst	1722439
AA151274	DBEst	1719600
AA151594	DBEst	1720081
AA151755	DBEst	1720310
AA152476	DBEst	1718704
AA155754	DBEst	1727371
AA156066	DBEst	1727700
AA157163	DBEst	1728787
AA157993	DBEst	1732804
AA158738	DBEst	1733549
AA159110	DBEst	1733921
AA159576	DBEst	1735127
AA161003	DBEst	1735290
AA161076	DBEst	1735364
AA161467	DBEst	1735906
AA164193	DBEst	1741344
AA164473	DBEst	1740650
AA164729	DBEst	1740889
AA164873	DBEst	1741032
AA165027	DBEst	1740273
AA165068	DBEst	1740296
AA165087	DBEst	1740315
AA165174	DBEst	1740402
AA165282	DBEst	1740510
AA165293	DBEst	1740521
AA165638	DBEst	1741671
AA166618	DBEst	1745207
AA167041	DBEst	1745434
AA167750	DBEst	1744900
AA171630	DBEst	1750889
AA173506	DBEst	1753638
AA174097	DBEst	1754302
AA179187	DBEst	1760556
AA180137	DBEst	1761403
AA180224	DBEst	1761553
AA180383	DBEst	1761692
AA181075	DBEst	1764592
AA181258	DBEst	1764785
AA181684	DBEst	1765213
AA182415	DBEst	1766238
AA182540	DBEst	1766256
AA186577	DBEst	1774676
AA187817	DBEst	1774011
AA188045	DBEst	1774295
AA188140	DBEst	1774332
AA188384	DBEst	1775418
AA188826	DBEst	1775853
AA190873	DBEst	1779393
AA191422	DBEst	1780101
AA192094	DBEst	1782111
AA193308	DBEst	1782719
AA194577	DBEst	1784338

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA195246	DBEst	1784946
AA195865	DBEst	1791530
AA196424	DBEst	1791999
AA196982	DBEst	1792573
AA203691	DBEst	1799458
AA204867	DBEst	1802927
AA206578	DBEst	1801958
AA206991	DBEst	1801246
AA209508	DBEst	1807460
AA216753	DBEst	1817452
AA219665	DBEst	1833722
AA223121	DBEst	1843680
AA223820	DBEst	1844362
AA224109	DBEst	1844668
AA224407	DBEst	1845029
AA227118	DBEst	1848672
AA229325	DBEst	1851167
AA229611	DBEst	1851608
AA232959	DBEst	1855951
AA233835	DBEst	1856856
AA233843	DBEst	1856920
AA234092	DBEst	1858897
AA234307	DBEst	1858618
AA236776	DBEst	1860841
AA242985	DBEst	1873780
AA243338	DBEst	1874149
AA244342	DBEst	1875177
AA249154	DBEst	1879783
AA255502	DBEst	1892406
AA256591	DBEst	1892130
AA261990	DBEst	1897971
AA262939	DBEst	1898659
AA278445	DBEst	1919782
AA278482	DBEst	1919801
AA278642	DBEst	1919962
AA278956	DBEst	1920495
AA279048	DBEst	1920577
AA280099	DBEst	1921573
AA280221	DBEst	1921759
AA280828	DBEst	1923508
AA282915	DBEst	1925910
AA284334	DBEst	1928614
AA284555	DBEst	1927484
AA284670	DBEst	1927581
AA284671	DBEst	1927582
AA284870	DBEst	1927464
AA284906	DBEst	1927448
AA285290	DBEst	1929600
AA286699	DBEst	1933581
AA286872	DBEst	1933932
AA287219	DBEst	1934280
AA287642	DBEst	1933325
AA287815	DBEst	1933514
AA291438	DBEst	1939417
AA291485	DBEst	1939506
AA291971	DBEst	1940027
AA292334	DBEst	1940314
AA293127	DBEst	1941167
AA293133	DBEst	1941173
AA293273	DBEst	1941423
AA293286	DBEst	1941377
AA293353	DBEst	1940750
AA293572	DBEst	1941239

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA293629	DBEst	1941280
AA293759	DBEst	1941542
AA293804	DBEst	1941727
AA296780	DBEst	1949277
AA297402	DBEst	1949735
AA298505	DBEst	1950908
AA299640	DBEst	1951971
AA301062	DBEst	1953433
AA301800	DBEst	1954133
AA303461	DBEst	1955795
AA303568	DBEst	1955901
AA306718	DBEst	1959046
AA306862	DBEst	1959190
AA306876	DBEst	1959204
AA307198	DBEst	1959526
AA307325	DBEst	1959653
AA308065	DBEst	1960394
AA308274	DBEst	1960673
AA308744	DBEst	1961143
AA310739	DBEst	1963088
AA310771	DBEst	1963242
AA311228	DBEst	1963628
AA311460	DBEst	1963786
AA311571	DBEst	1964055
AA311801	DBEst	1964150
AA311848	DBEst	1964177
AA311905	DBEst	1964306
AA312218	DBEst	1964618
AA312240	DBEst	1964578
AA312435	DBEst	1964763
AA313108	DBEst	1965456
AA313223	DBEst	1965552
AA313653	DBEst	1965983
AA313994	DBEst	1966555
AA314431	DBEst	1966760
AA314872	DBEst	1967221
AA315363	DBEst	1967742
AA315379	DBEst	1967707
AA317243	DBEst	1969570
AA317393	DBEst	1969772
AA318969	DBEst	1971371
AA327201	DBEst	1979467
AA331991	DBEst	1984254
AA332672	DBEst	1984936
AA333358	DBEst	1985601
AA335273	DBEst	1987516
AA336666	DBEst	1988905
AA337192	DBEst	1989429
AA337489	DBEst	1989954
AA338793	DBEst	1991103
AA339957	DBEst	1992224
AA340341	DBEst	1992579
AA341446	DBEst	1993684
AA341465	DBEst	1993733
AA342969	DBEst	1995205
AA343629	DBEst	1995868
AA344084	DBEst	1996321
AA345329	DBEst	1997564
AA346393	DBEst	1998631
AA346698	DBEst	1999168
AA347887	DBEst	2000122
AA350059	DBEst	2002398
AA351507	DBEst	2003827

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA355003	DBEst	2007559
AA356682	DBEst	2009000
AA357574	DBEst	2009894
AA358887	DBEst	2011207
AA359705	DBEst	2012096
AA364352	DBEst	2016692
AA367451	DBEst	2019769
AA367773	DBEst	2020090
AA368542	DBEst	2021085
AA369400	DBEst	2021719
AA373230	DBEst	2025550
AA374754	DBEst	2027074
AA375312	DBEst	2027642
AA375815	DBEst	2028133
AA393525	DBEst	2046493
AA394115	DBEst	2047129
AA398443	DBEst	2051755
AA398585	DBEst	2051827
AA398739	DBEst	2051861
AA399165	DBEst	2052960
AA399628	DBEst	2052642
AA401329	DBEst	2053554
AA401334	DBEst	2053559
AA402191	DBEst	2056138
AA402289	DBEst	2056202
AA402775	DBEst	2056528
AA403319	DBEst	2056820
AA404613	DBEst	2058825
AA405124	DBEst	2063536
AA406239	DBEst	2064220
AA410580	DBEst	2069686
AA410982	DBEst	2070088
AA411021	DBEst	2070171
AA411252	DBEst	2068793
AA411764	DBEst	2070352
AA417794	DBEst	2079604
AA419263	DBEst	2078976
AA419284	DBEst	2079014
AA420751	DBEst	2094630
AA420758	DBEst	2094637
AA421248	DBEst	2100135
AA421682	DBEst	2100499
AA422060	DBEst	2100893
AA422143	DBEst	2101011
AA425004	DBEst	2107073
AA425468	DBEst	2106322
AA425737	DBEst	2107249
AA429794	DBEst	2113001
AA430400	DBEst	2110974
AA430436	DBEst	2110992
AA431428	DBEst	2115136
AA433988	DBEst	2138902
AA436315	DBEst	2141229
AA436411	DBEst	2141325
AA443024	DBEst	2155699
AA449394	DBEst	2162785
AA451779	DBEst	2165448
AA453878	DBEst	2167547
AA454668	DBEst	2177444
AA454953	DBEst	2177729
AA454962	DBEst	2177738
AA455245	DBEst	2178021
AA455785	DBEst	2178561

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA456557	DBEst	2179133
AA457255	DBEst	2179975
AA457579	DBEst	2180299
AA459167	DBEst	2184074
AA459210	DBEst	2184117
AA459527	DBEst	2184434
AA460570	DBEst	2185690
AA460816	DBEst	2185936
AA461005	DBEst	2186125
AA468657	DBEst	2195191
AA469447	DBEst	2194242
AA469453	DBEst	2194248
AA476522	DBEst	2204733
AA477018	DBEst	2205229
AA477567	DBEst	2206201
AA477973	DBEst	2206607
AA478230	DBEst	2206864
AA479646	DBEst	2205532
AA479648	DBEst	2205534
AA479848	DBEst	2205734
AA481078	DBEst	2210630
AA481710	DBEst	2211262
AA482430	DBEst	2210108
AA482432	DBEst	2210110
AA482779	DBEst	2211624
AA483258	DBEst	2212071
AA483726	DBEst	2212539
AA483858	DBEst	2212671
AA484181	DBEst	2212994
AA486047	DBEst	2216263
AA486859	DBEst	2217023
AA488141	DBEst	2215572
AA488385	DBEst	2215816
AA488517	DBEst	2215948
AA489323	DBEst	2218925
AA489380	DBEst	2218982
AA489382	DBEst	2218984
AA491204	DBEst	2220377
AA492143	DBEst	2221705
AA493371	DBEst	2223212
AA494321	DBEst	2224108
AA494552	DBEst	2224339
AA501657	DBEst	2236624
AA502136	DBEst	2237103
AA505780	DBEst	2241917
AA512933	DBEst	2251356
AA514395	DBEst	2253995
AA514974	DBEst	2254574
AA515143	DBEst	2254743
AA516376	DBEst	2253738
AA521006	DBEst	2261549
AA523522	DBEst	2264234
AA524748	DBEst	2265676
AA524950	DBEst	2265878
AA525141	DBEst	2266069
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AA527275	DBEst	2269344
AA527557	DBEst	2269626
AA533506	DBEst	2277602
AA534349	DBEst	2278602
AA534586	DBEst	2278839
AA534608	DBEst	2278861

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA535496	DBEst	2279749
AA541651	DBEst	2288085
AA548056	DBEst	2318338
AA548600	DBEst	2318882
AA550854	DBEst	2321106
AA550855	DBEst	2321107
AA551351	DBEst	2321603
AA551391	DBEst	2321643
AA554437	DBEst	2324976
AA554735	DBEst	2325274
AA555102	DBEst	2325641
AA564272	DBEst	2335911
AA564870	DBEst	2336509
AA565420	DBEst	2337059
AA568936	DBEst	2341990
AA569816	DBEst	2343796
AA569851	DBEst	2343831
AA569916	DBEst	2343896
AA573761	DBEst	2348276
AA573787	DBEst	2348302
AA577537	DBEst	2355011
AA578881	DBEst	2357065
AA579591	DBEst	2357775
AA579890	DBEst	2355217
AA580835	DBEst	2358607
AA582093	DBEst	2360771
AA582866	DBEst	2360226
AA583055	DBEst	2360415
AA583498	DBEst	2368107
AA583567	DBEst	2368176
AA583773	DBEst	2368382
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AA586755	DBEst	2397569
AA587140	DBEst	2397954
AA587315	DBEst	2398129
AA587873	DBEst	2402048
AA593983	DBEst	2409333
AA594366	DBEst	2409716
AA595624	DBEst	2410974
AA595771	DBEst	2411121
AA599454	DBEst	2433079
AA600227	DBEst	2433852
AA600771	DBEst	2434396
AA601172	DBEst	2434797
AA602395	DBEst	2436373
AA602871	DBEst	2436805
AA603125	DBEst	2436986
AA603177	DBEst	2437038
AA604324	DBEst	2445233
AA604853	DBEst	2445717
AA610279	DBEst	2458707
AA610476	DBEst	2458904
AA610734	DBEst	2459162
AA614482	DBEst	2466678
AA628536	DBEst	2540923
AA628547	DBEst	2540934
AA630611	DBEst	2553222
AA631326	DBEst	2553937
AA633909	DBEst	2557123
AA634260	DBEst	2557474
AA634298	DBEst	2557512
AA640505	DBEst	2565755
AA641289	DBEst	2566539

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA644625	DBEst	2569843
AA648944	DBEst	2575373
AA651720	DBEst	2583372
AA652478	DBEst	2584130
AA652505	DBEst	2584157
AA653775	DBEst	2589929
AA658374	DBEst	2594528
AA663005	DBEst	2616996
AA669154	DBEst	2630653
AA677560	DBEst	2658082
AA677750	DBEst	2658272
AA678185	DBEst	2658707
AA678251	DBEst	2658773
AA687495	DBEst	2675686
AA703208	DBEst	2706321
AA703667	DBEst	2713585
AA703907	DBEst	2713825
AA704208	DBEst	2714126
AA706347	DBEst	2716265
AA714010	DBEst	2726284
AA715984	DBEst	2728258
AA716651	DBEst	2728925
AA719530	DBEst	2732629
AA721642	DBEst	2736625
AA729381	DBEst	2750740
AA731946	DBEst	2753897
AA736817	DBEst	2768051
AA742713	DBEst	2782219
AA743278	DBEst	2782784
AA744681	DBEst	2783445
AA745953	DBEst	2785939
AA759195	DBEst	2807058
AA767779	DBEst	2818794
AA769697	DBEst	2820935
AA773998	DBEst	2825887
AA775058	DBEst	2834392
AA776593	DBEst	2835927
AA777384	DBEst	2836715
AA778672	DBEst	2838003
AA779949	DBEst	2839280
AA781487	DBEst	2840818
AA788907	DBEst	2849027
AA806278	DBEst	2875028
AA806735	DBEst	2875485
AA808769	DBEst	2878175
AA810149	DBEst	2879555
AA811609	DBEst	2881220
AA813604	DBEst	2882289
AA826307	DBEst	2899619
AA833766	DBEst	2908534
AA833900	DBEst	2907499
AA837457	DBEst	2912656
AA843531	DBEst	2930049
AA845737	DBEst	2931877
AA846698	DBEst	2932838
AA846856	DBEst	2932996
AA852896	DBEst	2939635
AA856902	DBEst	2945204
AA857824	DBEst	2946126
AA857882	DBEst	2946184
AA861665	DBEst	2953805
AA865960	DBEst	2958236
AA868529	DBEst	2963974

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA873271	DBEst	2969393
AA877189	DBEst	2986266
AA884922	DBEst	2994903
AA886453	DBEst	3001561
AA906652	DBEst	3042238
AA906865	DBEst	3042109
AA918993	DBEst	3058883
AA926926	DBEst	3075823
AA928934	DBEst	3078291
AA932501	DBEst	3087282
AA933987	DBEst	3090255
AA935947	DBEst	3093104
AA937302	DBEst	3095413
AA937773	DBEst	3095884
AA947835	DBEst	3109088
AA954939	DBEst	3118634
AA962587	DBEst	3134751
AA962632	DBEst	3134796
AA972525	DBEst	3145289
AA976489	DBEst	3152281
AA983380	DBEst	3161905
AA984586	DBEst	3163111
AA992596	DBEst	3179352
AB002305	GenBank	2224554
AB002330	GenBank	2224604
AB002357	GenBank	2224658
AB002806	GenBank	2780782
AB003476	GenBank	2081606
AB004066	GenBank	2308996
AB006077	GenBank	2564010
AB006534	GenBank	2924619
AB006755	GenBank	2979417
AB007867	GenBank	2662094
AB007900	GenBank	2662160
AB007916	GenBank	6683704
AB007923	GenBank	3413869
AB007957	GenBank	3413931
AB011103	GenBank	3043585
AB011143	GenBank	3043665
AB011151	GenBank	3043681
AB011166	GenBank	3043711
AB014533	GenBank	3327079
AB014542	GenBank	3327097
AB014560	GenBank	3327133
AB015630	GenBank	4586837
AB015856	GenBank	3953530
AB018281	GenBank	3882196
AB018284	GenBank	3882202
AB018285	GenBank	3882204
AB018289	GenBank	3882212
AB018305	GenBank	3882244
AB018327	GenBank	3882288
AB018331	GenBank	3882296
AB018337	GenBank	3882308
AB019409	GenBank	4587128
AB019563	GenBank	3885366
AB019568	GenBank	3885371
AB019691	GenBank	5051742
AB020682	GenBank	4240238
AB020718	GenBank	4240310
AB021288	GenBank	4038732
AB023154	GenBank	4589517
AB023219	GenBank	4589647

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AB024704	GenBank	4589928
AB027467	GenBank	6172222
AB028069	GenBank	4996095
AB028624	GenBank	5103045
AB028969	GenBank	5689428
AB028986	GenBank	5689462
AB029000	GenBank	5689490
AB029004	GenBank	5689498
AB029028	GenBank	5689546
AC03044	N/A	N/A
AC31479	N/A	N/A
AF000670	GenBank	3153911
AF000974	GenBank	2232135
AF001893	GenBank	2529723
AF004562	GenBank	3041872
AF006043	GenBank	2674061
AF007135	GenBank	2852610
AF007151	GenBank	2852629
AF007170	GenBank	2865251
AF009615	GenBank	2393946
AF013759	GenBank	3153208
AF013988	GenBank	2318114
AF015283	GenBank	2384720
AF015767	GenBank	2353176
AF016507	GenBank	2909776
AF016582	GenBank	2367668
AF017790	GenBank	2501872
AF019767	GenBank	3510461
AF021351	GenBank	2460207
AF021819	GenBank	2460317
AF022229	GenBank	2809382
AF023266	GenBank	4103447
AF025439	GenBank	2815605
AF026166	GenBank	4090928
AF026939	GenBank	2612967
AF027205	GenBank	2598967
AF031385	GenBank	2606093
AF034607	GenBank	4426566
AF035286	GenBank	2661038
AF035309	GenBank	2661070
AF035313	GenBank	2661075
AF037204	GenBank	2906012
AF038661	GenBank	3132897
AF039019	GenBank	2828109
AF039291	GenBank	4104738
AF039843	GenBank	2809399
AF040990	GenBank	2804783
AF041483	GenBank	3493528
AF042385	GenBank	2828148
AF042729	GenBank	7770717
AF044588	GenBank	2865520
AF045184	GenBank	3417598
AF047438	GenBank	3335131
AF047472	GenBank	2921872
AF048977	GenBank	3005586
AF050171	GenBank	5668577
AF050199	GenBank	2961556
AF050639	GenBank	4164453
AF052124	GenBank	3360431
AF052135	GenBank	3360444
AF052149	GenBank	3360459
AF052164	GenBank	3360475
AF052169	GenBank	3360480

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AF052180	GenBank	3360492
AF052514	GenBank	3510662
AF054183	GenBank	4092053
AF054187	GenBank	4092059
AF054840	GenBank	2997744
AF055012	GenBank	3005735
AF055033	GenBank	3005763
AF057299	GenBank	5739040
AF059252	GenBank	3372629
AF061258	GenBank	3108092
AF062318	GenBank	3152814
AF063611	GenBank	4731856
AF064019	GenBank	3347856
AF068235	GenBank	4321975
AF068846	GenBank	3201999
AF070523	GenBank	3764088
AF070537	GenBank	3387894
AF070555	GenBank	3387920
AF070561	GenBank	3387928
AF070596	GenBank	3387973
AF070600	GenBank	3387979
AF070626	GenBank	3283892
AF070649	GenBank	3283923
AF070662	GenBank	4454699
AF070672	GenBank	3978239
AF071202	GenBank	3335172
AF071219	GenBank	3288867
AF071593	GenBank	3249712
AF073298	GenBank	3641537
AF075587	GenBank	3319325
AF077030	GenBank	4689107
AF077045	GenBank	4689137
AF077200	GenBank	4679013
AF077202	GenBank	4679017
AF077207	GenBank	4679027
AF081192	GenBank	3420798
AF081484	GenBank	3420928
AF083190	GenBank	3599414
AF085355	GenBank	5114044
AF086003	GenBank	3483348
AF086116	GenBank	3483461
AF086178	GenBank	3483523
AF086205	GenBank	3483550
AF086207	GenBank	3483552
AF086336	GenBank	3483681
AF086517	GenBank	3483862
AF087135	GenBank	3641297
AF087990	GenBank	3523196
AF088036	GenBank	3523242
AF091076	GenBank	3859989
AF092563	GenBank	3851583
AF095287	GenBank	3766235
AF095791	GenBank	3777595
AF097709	GenBank	3777616
AF100741	GenBank	5138992
AF100756	GenBank	5410297
AF100928	GenBank	4323586
AF104222	GenBank	3983426
AF104913	GenBank	3941723
AF104923	GenBank	4680483
AF107405	GenBank	5531903
AF120334	GenBank	4191615
AF124438	GenBank	4838431

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AF124439	GenBank	4838433
AF125525	GenBank	4689281
AF131799	GenBank	4406628
AF131814	GenBank	4406648
AF139461	GenBank	4894945
AF139658	GenBank	4894940
AF144755	GenBank	5006628
AF147331	GenBank	4761682
AF150962	GenBank	5020252
AF151832	GenBank	4929616
AF151868	GenBank	4929688
AF151898	GenBank	4929748
AF151907	GenBank	4929766
AF152097	GenBank	4929772
AF159295	GenBank	5714635
AF176702	GenBank	6103642
AF190744	GenBank	6176531
AI004664	DBEst	3214174
AI004915	DBEst	3214425
AI016073	DBEst	3230409
AI016323	DBEst	3230659
AI016791	DBEst	3231127
AI018451	DBEst	3232970
AI018625	DBEst	3233144
AI022779	DBEst	3238020
AI023799	DBEst	3238843
AI026164	DBEst	3241777
AI027516	DBEst	3246446
AI031636	DBEst	3249848
AI033037	DBEst	3253990
AI034115	DBEst	3255068
AI037859	DBEst	3277053
AI041670	DBEst	3280864
AI042034	DBEst	3281228
AI042290	DBEst	3281484
AI051971	DBEst	3307962
AI056917	DBEst	3330706
AI057124	DBEst	3331000
AI066419	DBEst	3367121
AI078041	DBEst	3412449
AI081116	DBEst	3417908
AI081472	DBEst	3418264
AI081913	DBEst	3418705
AI082244	DBEst	3419036
AI082648	DBEst	3419440
AI084731	DBEst	3423154
AI085381	DBEst	3423804
AI087291	DBEst	3425714
AI087819	DBEst	3426852
AI088178	DBEst	3427256
AI089981	DBEst	3429040
AI090524	DBEst	3429583
AI090623	DBEst	3429682
AI091425	DBEst	3430484
AI092971	DBEst	3431947
AI095477	DBEst	3434453
AI123229	DBEst	3538995
AI125642	DBEst	3594156
AI125874	DBEst	3594388
AI127013	DBEst	3595527
AI127556	DBEst	3596070
AI140291	DBEst	3647748
AI141130	DBEst	3648587

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AI143899	DBEst	3665708
AI144100	DBEst	3665909
AI148251	DBEst	3675933
AI149429	DBEst	3677898
AI149592	DBEst	3678061
AI186028	DBEst	3736666
AI186042	DBEst	3736680
AI190341	DBEst	3741550
AI192367	DBEst	3743576
AI192629	DBEst	3743838
AI198930	DBEst	3751536
AI216969	DBEst	3789623
AI217003	DBEst	3789657
AI223292	DBEst	3805495
AI241706	DBEst	3837103
AI251743	DBEst	3848272
AI252466	DBEst	3848995
AI253330	DBEst	3850451
AI253335	DBEst	3850456
AI253338	DBEst	3850459
AI253375	DBEst	3850496
AI253379	DBEst	3850500
AI253436	DBEst	3850391
AI262380	DBEst	3870583
AI263674	DBEst	3871877
AI267162	DBEst	3886329
AI267185	DBEst	3886352
AI267209	DBEst	3886376
AI267289	DBEst	3886456
AI267307	DBEst	3886474
AI267321	DBEst	3886488
AI267454	DBEst	3886621
AI267502	DBEst	3886669
AI268293	DBEst	3887460
AI269060	DBEst	3888227
AI269369	DBEst	3888536
AI270183	DBEst	3889350
AI270472	DBEst	3889639
AI271786	DBEst	3890953
AI272827	DBEst	3895095
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AI276341	DBEst	3898615
AI276839	DBEst	3899113
AI278611	DBEst	3916845
AI280022	DBEst	3918255
AI283548	DBEst	3921781
AI288965	DBEst	3931274
AI290565	DBEst	3933339
AI291683	DBEst	3934457
AI292286	DBEst	3935060
AI298472	DBEst	3958208
AI298941	DBEst	3958595
AI304857	DBEst	3988546
AI308959	DBEst	4003830
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AI333055	DBEst	4069614
AI333116	DBEst	4069675
AI335249	DBEst	4072176
AI336326	DBEst	4073253
AI345325	DBEst	4082531
AI366549	DBEst	4126238
AI366549	DBEst	4126238

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AI375624	DBEst	4175614
AI375624	DBEst	4175614
AI376561	DBEst	4186410
AI399636	DBEst	4242723
AI417384	DBEst	4260888
AI421720	DBEst	4267651
AI424841	DBEst	4270772
AI431507	DBEst	4303669
AI433180	DBEst	4287371
AI434084	DBEst	4293703
AI434401	DBEst	4295922
AI436016	DBEst	4307232
AI436448	DBEst	4281781
AI446503	DBEst	4295666
AI453199	DBEst	4308687
AI459028	DBEst	4311607
AI469237	DBEst	4331327
AI492520	DBEst	4393523
AI492769	DBEst	4393772
AI494344	DBEst	4395347
AI523940	DBEst	4438075
AI524677	DBEst	4438812
AI538682	DBEst	4452817
AI557059	DBEst	4489422
AI561260	DBEst	4511601
AI567988	DBEst	4526440
AI569715	DBEst	4533089
AI581291	DBEst	4565667
AI583211	DBEst	4569108
AI583570	DBEst	4569467
AI589301	DBEst	4598349
AI597938	DBEst	4606986
AI608591	DBEst	4617758
AI608787	DBEst	4617954
AI608968	DBEst	4618135
AI609193	DBEst	4618360
AI609281	DBEst	4618448
AI623804	DBEst	4648735
AI628689	DBEst	4665489
AI636635	DBEst	4687965
AI650837	DBEst	4734816
AI654096	DBEst	4738075
AI660245	DBEst	4763815
AI669253	DBEst	4834027
AI670084	DBEst	4834858
AI674313	DBEst	4874793
AI678152	DBEst	4888334
AI678703	DBEst	4888885
AI679044	DBEst	4889226
AI679321	DBEst	4889503
AI683140	DBEst	4893322
AI683338	DBEst	4893520
AI683793	DBEst	4893975
AI688798	DBEst	4900092
AI692866	DBEst	4970206
AI694087	DBEst	4971427
AI696819	DBEst	4984719
AI697501	DBEst	4985401
AI734922	DBEst	5056446
AI735069	DBEst	5056668
AI739337	DBEst	5101318
AI739377	DBEst	5101358

TABLE 1-1

<u>ACC NOM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AI743595	DBEst	5111883
AI743691	DBEst	5111979
AI750198	DBEst	5128462
AI750909	DBEst	5129173
AI751119	DBEst	5129306
AI751364	DBEst	5129628
AI751565	DBEst	5129829
AI752319	DBEst	5130583
AI752553	DBEst	5130817
AI752929	DBEst	5131193
AI753108	DBEst	5131372
AI753671	DBEst	5131935
AI754437	DBEst	5132701
AI755181	DBEst	5133445
AI758869	DBEst	5152594
AI761927	DBEst	5177594
AI763126	DBEst	5178793
AI791906	DBEst	5339622
AI793120	DBEst	5340836
AI799521	DBEst	5364993
AI804346	DBEst	5369818
AI808109	DBEst	5394597
AI811021	DBEst	5397587
AI811845	DBEst	5398411
AI814139	DBEst	5425354
AI814674	DBEst	5425889
AI815868	DBEst	5431414
AI822030	DBEst	5441109
AI827641	DBEst	5448312
AI859619	DBEst	5513235
AI864580	DBEst	5528687
AI878968	DBEst	5553017
AI879179	DBEst	5553228
AI879367	DBEst	5553416
AI879992	DBEst	5554041
AI888377	DBEst	5593464
AI911704	DBEst	5631559
AI911997	DBEst	5631852
AI912084	DBEst	5631939
AI916284	DBEst	5636229
AI916584	DBEst	5636439
AI923224	DBEst	5659188
AI924096	DBEst	5660060
AI928185	DBEst	5664149
AI929819	DBEst	5665783
AI936748	DBEst	5675618
AI950087	DBEst	5742397
AI955808	DBEst	5748118
AJ001258	GenBank	2769648
AJ002030	GenBank	2570006
AJ006026	GenBank	3127893
AJ011001	GenBank	4456466
AJ011915	GenBank	3757675
AJ012499	GenBank	5441359
AJ223183	GenBank	3925598
AL035802	DBEst	5927582
AL035987	DBEst	5405617
AL036801	DBEst	5927917
AL037646	DBEst	5928237
AL038985	DBEst	5408101
AL039150	DBEst	5408232
AL041780	DBEst	5421127
AL044019	DBEst	5432247

TABLE 1-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AL046804	DBEst	5434866
AL049055	DBEst	4728364
AL049227	GenBank	4499957
AL049229	GenBank	4499961
AL049296	GenBank	4500057
AL049464	GenBank	4500256
AL049953	GenBank	4884201
AL049954	GenBank	4884203
AL049955	GenBank	4884205
AL049959	GenBank	4884211
AL049987	GenBank	4884238
AL049999	GenBank	4884252
AL050011	GenBank	4884080
AL050089	GenBank	4884107
AL050141	GenBank	4884352
AL050171	GenBank	4884383
AL050187	GenBank	4884402
AL050198	GenBank	4884436
AL050217	GenBank	4884458
AL050392	GenBank	4914613
AL080062	GenBank	5262466
AL080186	GenBank	5262664
AL080235	GenBank	5262728
AL096857	GenBank	5541862
AL096858	GenBank	5541864
AL110197	GenBank	5817115
AL110235	GenBank	5817176
AL117237	GenBank	5834563
AL117499	GenBank	5912003
AL117534	GenBank	5912062
AL118999	DBEst	5924898
AL119085	DBEst	5924984
AL119157	DBEst	5925056
AW020479	DBEst	5874009
AW044114	DBEst	5904643
AW102841	DBEst	6073454
C02094	DBEst	1434324
C16886	DBEst	1571593
C18886	DBEst	1580488
D00017	GenBank	219909
D00022	GenBank	219653
D00068	GenBank	220080
D00099	GenBank	219941
D00422	GenBank	220063
D10495	GenBank	520586
D13119	GenBank	285909
D13287	GenBank	496370
D13665	GenBank	393318
D13866	GenBank	433410
D14662	GenBank	285948
D14697	GenBank	285964
D14710	GenBank	559324
D14812	GenBank	285968
D15049	GenBank	475003
D16431	GenBank	598955
D16937	GenBank	598856
D17188	GenBank	598702
D17268	GenBank	598899
D17409	GenBank	2335046
D17793	GenBank	457407
D21063	GenBank	434752
D23660	GenBank	432358
D25542	GenBank	662389

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
D28759	GenBank	633074
D29677	GenBank	473938
D31767	GenBank	505091
D31784	GenBank	974184
D31883	GenBank	505093
D31890	GenBank	505107
D37991	GenBank	1019367
D38491	GenBank	559327
D38583	GenBank	560790
D43948	GenBank	603950
D43950	GenBank	603954
D45248	GenBank	1008914
D45887	GenBank	665587
D45915	GenBank	1483130
D49489	GenBank	1136742
D49547	GenBank	710654
D50310	GenBank	1183161
D50371	GenBank	2605591
D55192	DBEst	957089
D55649	GenBank	1132478
D56120	DBEst	970603
D59253	GenBank	1060898
D78586	GenBank	1228048
D79826	DBEst	1180177
D79983	GenBank	1136383
D79986	GenBank	1136389
D79997	GenBank	1136409
D80006	GenBank	1136427
D80012	GenBank	1136437
D80087	DBEst	1177964
D80253	DBEst	1178130
D81635	DBEst	1179512
D82128	DBEst	1183520
D82348	GenBank	1311461
D83197	GenBank	3893154
D83327	GenBank	2687860
D83784	GenBank	1663695
D86227	GenBank	2081619
D87437	GenBank	1665768
D87442	GenBank	1665772
D87470	GenBank	1665822
D87666	GenBank	1620016
D87667	GenBank	1620019
D87682	GenBank	1663699
D87735	GenBank	1620021
D87969	GenBank	1694636
D89052	GenBank	1694672
D90226	GenBank	219946
D90373	GenBank	219477
E00882	GenBank	2169143
E01650	GenBank	2169903
E01797	GenBank	2170049
E01813	GenBank	2170065
E01827	GenBank	2170079
E01979	GenBank	2170227
E02628	GenBank	2170856
E02651	GenBank	2170879
E03569	GenBank	2171785
E06721	GenBank	2174903
E07218	GenBank	2175359
F28779	DBEst	4814405
F30276	DBEst	4815902
F31082	DBEst	4816708

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
H03854	DBEst	866787
H05412	DBEst	868964
H08994	DBEst	873816
H13339	DBEst	878159
H16426	DBEst	881246
H39960	DBEst	916012
H48742	DBEst	988582
H59372	DBEst	1012204
H60722	DBEst	1013554
H69238	DBEst	1030614
H72481	DBEst	1044297
H75695	DBEst	1049638
H78517	DBEst	1056606
H79084	DBEst	1057173
H84729	DBEst	1063923
H85709	DBEst	1067288
H89654	DBEst	1080084
J00269	GenBank	186699
J02621	GenBank	184229
J03005	GenBank	183183
J03040	GenBank	338312
J03171	GenBank	184645
J03191	GenBank	190385
J03210	GenBank	180670
J03464	GenBank	179595
J03473	GenBank	337423
J03799	GenBank	186840
J04080	GenBank	179645
J04164	GenBank	177801
J04177	GenBank	179729
J04765	GenBank	189404
J05013	GenBank	182417
J05021	GenBank	340216
J05192	GenBank	178026
J05633	GenBank	186504
K00558	GenBank	340020
K01566	GenBank	187721
K02765	GenBank	179664
L00160	GenBank	189904
L02547	GenBank	180598
L05092	GenBank	388031
L05186	GenBank	182394
L07633	GenBank	186512
L11066	GenBank	307322
L11932	GenBank	307423
L12711	GenBank	388890
L13848	GenBank	307382
L14599	GenBank	348238
L19161	GenBank	306899
L19184	GenBank	440305
L19597	GenBank	306467
L20941	GenBank	507251
L23959	GenBank	414316
L26081	GenBank	799328
L27560	GenBank	452059
L28010	GenBank	452047
L28809	GenBank	454151
L33404	GenBank	521214
L33930	GenBank	500848
L34155	GenBank	551596
L34839	GenBank	1220373
L38486	GenBank	790816
L42024	GenBank	804748

TABLE 1-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
L43575	GenBank	899064
L44349	DBEst	1048859
L54057	GenBank	1196416
M10036	GenBank	339840
M10119	GenBank	182517
M10905	GenBank	182696
M11146	GenBank	182504
M13573	GenBank	189663
M13955	GenBank	186729
M14083	GenBank	189566
M14483	GenBank	339692
M14630	GenBank	339690
M14631	GenBank	183416
M15182	GenBank	183232
M15800	GenBank	187297
M16247	GenBank	178044
M16553	GenBank	339503
M16660	GenBank	184420
M16937	GenBank	184300
M17597	GenBank	340057
M17885	GenBank	190231
M20372	GenBank	189372
M22146	GenBank	337929
M22382	GenBank	190126
M22590	GenBank	179418
M22918	GenBank	189019
M22920	GenBank	189021
M23613	GenBank	189271
M24194	GenBank	187701
M25246	GenBank	340233
M26041	GenBank	188134
M26152	GenBank	1160968
M26325	GenBank	186688
M27913	GenBank	339807
M27971	GenBank	187621
M28373	GenBank	609448
M31159	GenBank	183115
M31212	GenBank	188589
M31899	GenBank	182178
M32110	GenBank	189421
M32790	GenBank	180804
M32798	GenBank	180856
M33308	GenBank	340236
M34064	GenBank	416292
M37583	GenBank	184059
M38106	GenBank	189169
M55409	GenBank	189596
M55542	GenBank	183001
M58485	GenBank	180154
M60457	GenBank	181249
M60854	GenBank	338446
M62403	GenBank	184815
M62810	GenBank	188563
M64241	GenBank	190813
M67468	GenBank	182672
M69181	GenBank	641957
M74002	GenBank	178996
M75126	GenBank	184020
M76729	GenBank	189519
M78113	DBEst	273850
M81757	GenBank	337732
M83248	GenBank	189150
M84739	GenBank	179881

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
M87503	GenBank	184652
M88279	GenBank	186389
M92357	GenBank	306463
N20576	DBEst	1125531
N34255	DBEst	1155397
N35187	DBEst	1156329
N35421	DBEst	1156563
N39717	DBEst	1163262
N40823	DBEst	1164420
N40852	DBEst	1164449
N67927	DBEst	1220052
N76180	DBEst	1238758
N76677	DBEst	1239255
N77080	DBEst	1239658
N84497	DBEst	1260122
N86776	DBEst	1439978
N91638	DBEst	1263947
N92086	DBEst	1264395
N99205	DBEst	1270661
Q37741	N/A	N/A
Q48043	N/A	N/A
Q65676	N/A	N/A
Q90526	N/A	N/A
R06046	DBEst	756666
R17092	DBEst	770702
R47228	DBEst	808115
R55150	DBEst	824379
R55398	DBEst	824693
R68132	DBEst	841649
R72676	DBEst	846708
R73306	DBEst	847338
R78333	DBEst	853443
R92367	DBEst	959907
R93637	DBEst	967803
R99649	DBEst	986250
S41458	GenBank	252252
S42303	GenBank	253482
S54005	GenBank	264772
S66431	GenBank	435777
S70154	GenBank	546900
S70290	GenBank	546602
S79895	GenBank	1195555
S82076	GenBank	1488423
T02792	DBEst	319308
T24119	DBEst	523315
T49314	DBEst	651174
T53479	DBEst	655339
T58797	DBEst	660634
T64560	DBEst	673605
T66112	DBEst	675157
T92160	DBEst	724073
T92396	DBEst	724309
U00947	GenBank	405049
U04815	GenBank	507157
U07151	GenBank	460624
U07857	GenBank	469048
U08470	GenBank	478884
U10323	GenBank	532312
U10439	GenBank	577169
U12465	GenBank	562073
U13665	GenBank	606922
U13877	GenBank	606943
U14550	GenBank	565079

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
U14966	GenBank	550012
U15008	GenBank	600747
U16306	GenBank	608514
U17104	GenBank	609307
U17496	GenBank	596139
U19769	GenBank	924600
U20896	GenBank	1046220
U22431	GenBank	881345
U22815	GenBank	930340
U24105	GenBank	1638873
U24153	GenBank	780807
U27768	GenBank	1216372
U33760	GenBank	995823
U33833	GenBank	1517815
U34877	GenBank	1143231
U39361	GenBank	1066081
U41515	GenBank	1209723
U46570	GenBank	1688073
U50733	GenBank	1255187
U51586	GenBank	1809247
U56255	GenBank	1399688
U59305	GenBank	1695872
U60975	GenBank	5030423
U61083	GenBank	4097430
U61397	GenBank	1518693
U63846	GenBank	1480921
U67784	GenBank	1617516
U68723	GenBank	2114391
U68727	GenBank	2052384
U68758	GenBank	4097815
U70735	GenBank	2360944
U77085	GenBank	1684789
U79258	GenBank	1710211
U79274	GenBank	1710240
U79278	GenBank	1710247
U80213	GenBank	1857418
U81234	GenBank	4098960
U82130	GenBank	1772663
U86602	GenBank	1835785
U87309	GenBank	1842092
U90028	GenBank	2745975
U90441	GenBank	2439984
U90902	GenBank	1913880
U90917	GenBank	1913898
U94831	GenBank	2276459
V00478	GenBank	28244
V00503	GenBank	30123
V05728	N/A	N/A
V11636	N/A	N/A
V57903	N/A	N/A
V59662	N/A	N/A
V59746	N/A	N/A
V84428	N/A	N/A
V86232	N/A	N/A
V87930	N/A	N/A
W07215	DBEst	1281217
W19127	DBEst	1294870
W19407	DBEst	1295308
W19441	DBEst	1295361
W25547	DBEst	1303421
W26197	DBEst	1306608
W38952	DBEst	1320872
W56388	DBEst	1358278

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
W68015	DBEst	1376884
W73140	DBEst	1383275
W73168	DBEst	1383322
W76204	DBEst	1386429
W87522	DBEst	1401728
W87891	DBEst	1401976
X00351	GenBank	28251
X00497	GenBank	32130
X01742	GenBank	35324
X01924	N/A	N/A
X03084	GenBank	29537
X04098	GenBank	28338
X04408	GenBank	31914
X04470	GenBank	28638
X05276	GenBank	37201
X05908	GenBank	34387
X06700	GenBank	30053
X07819	GenBank	35798
X13425	GenBank	31590
X14420	GenBank	30057
X15729	GenBank	38317
X15880	GenBank	30029
X16869	GenBank	31091
X17206	GenBank	34391
X24068	N/A	N/A
X37385	N/A	N/A
X37509	N/A	N/A
X40178	N/A	N/A
X51466	GenBank	31105
X53505	GenBank	36145
X54304	GenBank	34755
X54941	GenBank	29976
X55110	GenBank	35086
X55885	GenBank	34030
X56932	GenBank	23690
X56998	GenBank	37564
X56999	GenBank	37568
X57766	GenBank	456256
X62744	GenBank	36062
X63432	GenBank	28335
X66360	GenBank	36616
X67698	GenBank	37476
X68277	GenBank	29980
X68880	GenBank	31141
X69398	GenBank	396175
X69838	GenBank	287864
X70340	GenBank	37089
X71087	GenBank	288396
X73608	GenBank	793844
X73902	GenBank	452754
X74039	GenBank	456192
X74801	GenBank	671526
X74979	GenBank	400462
X76013	GenBank	531595
X76180	GenBank	452649
X78627	GenBank	607129
X81109	GenBank	535057
X82676	GenBank	3929753
X84939	GenBank	695548
X85373	GenBank	806565
X93036	GenBank	1085025
X93207	GenBank	2462486
X94323	GenBank	1213612

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<u>ACC NOM</u>	<u>DATABASE</u>	<u>GI NBR</u>
X94754	GenBank	1702931
X97324	GenBank	1806039
X99920	GenBank	1694827
Y00503	GenBank	34038
Y00757	GenBank	23910
Y00815	GenBank	34266
Y09188	GenBank	2230868
Y11435	GenBank	2910996
Y12065	GenBank	2230877
Y13247	GenBank	2117158
Y13286	GenBank	2853173
Y15286	GenBank	2584788
Y17114	GenBank	4160551
Z18538	GenBank	28711
Z18954	GenBank	396706
Z19054	GenBank	38519
Z21507	GenBank	38521
Z26317	GenBank	416177
Z29093	GenBank	732799
Z31696	GenBank	479156
Z32564	GenBank	473235
Z36531	GenBank	535184
Z37986	GenBank	780262
Z46629	GenBank	758102
Z47087	GenBank	860989
Z74615	GenBank	1418927

Table 2A

#	IMAGE_ID	Gen Bank Accession Number	Ave-Normal- expression	Max- expression-of- 29	Max-fold-up	Count-up tumors	Count-up cell lines	Chromosome	Location	Tissue 1	Tissue 2	Tissue 3
28	138817	R62852	3.40	104.38	30.71	5.00	0.00	1	119.18	Heart	Placenta	Adipose
35	141562	R73003	284.38	1936.47	6.81	2.00	0.00	11	15.42	Ear	Placenta	Breast
36	245330	H54598	17.81	1247.32	70.02	5.00	0.00	5	640.83	Parathyroid	Placenta	Forekin
39	663636	AA119636	3.96	41.36	6.87	1.00	0.00	6	370.3	Lymph	Heart	Bone
43	416658	R62852	172.84	1148.01	6.64	1.00	1.00	12	93.93	Neural	Heart	Pooled
44	307653	H65248	29.69	401.10	13.51	1.00	0.00	12	93.93	Neural	Heart	Lymph
48	770192	AA434102	8.17	94.05	11.51	2.00	0.00	17	339.25	Small intestine	Testis	Testis
54	82871	T65046	2.44	13.61	5.58	1.00	0.00	17	185.58	Blood	Parathyroid	Pool
72	123730	R01281	4.04	21.40	5.29	2.00	0.00	1	185.58	Blood	Parathyroid	Pool
80	205994	R98436	0.87	4.57	5.26	1.00	0.00	1	185.58	Blood	Parathyroid	Pool
80	210575	H65065	12.82	75.35	5.88	3.00	0.00	1	185.58	Blood	Parathyroid	Pool
94	753184	AA400739	19.83	101.81	5.13	1.00	0.00	3	607.77	Liver	Whole embryo	Cervix
80	299678	V05629	10.34	170.19	10.42	2.00	0.00	2	473.05	Lymph	Synovial mem	Thyroid
87	124597	R02373	17.70	142.15	8.03	3.00	0.00	2	473.05	Lymph	Synovial mem	Thyroid
88	78629	T62451	10.11	126.38	12.50	6.00	0.00	4	420.51	Whole embryo	Pool	Heart
105	368834	AA079418	1.91	18.11	9.49	5.00	0.00	11	16.42	Head and nec	Thyroid	Adipose
115	785595	AA449459	32.04	420.31	13.12	2.00	0.00	11	16.42	Head and nec	Thyroid	Adipose
118	245330	H54598	16.00	2255.68	140.96	5.00	0.00	8	316.17	Head and nec	Thyroid	Adipose
120	193913	R83838	12.68	84.55	5.09	1.00	0.00	8	316.17	Head and nec	Thyroid	Adipose
121	66532	T67005	5.58	37.42	6.70	2.00	0.00	20	118.59	Lymph	Lung	Breast
125	183337	H42678	13.99	178.31	12.82	5.00	0.00	6	78.3	Thyroid	Bone	Ovary
142	785260	AA484856	65.22	1034.26	18.73	2.00	0.00	6	78.3	Thyroid	Bone	Ovary
148	810787	AA481758	52.79	372.83	7.06	1.00	0.00	18	80.38	Omentum	Nose	Eye
150	214441	H13590	3.21	285.97	89.16	7.00	0.00	14	278.43	Lymph node	Adipose	Small intestine
157	727251	AA412053	100.19	1601.71	15.99	6.00	0.00	12	39.87	Esophagus	Synovial mem	Parathyroid
159	564803	AA129552	18.52	118.34	6.39	1.00	1.00	12	17.99	Larynx	Thyroid	CNS
161	813678	AA453823	6.53	92.09	14.11	3.00	0.00	5	124.15	Eye	CNS	Brain
170	82591	T70503	9.44	51.73	5.48	0.00	1.00	6	528.66	Liver	Pooled	Whole embryo
176	785845	AA449118	11.47	64.12	5.59	0.00	1.00	10	335.81	Whole embryo	Pooled	Umbilical cord
177	241412	H81220	7.55	44.36	5.88	1.00	0.00	13	130.71	Small intestine	Tonsil	CNS
181	125134	R05416	1.08	5.80	5.39	1.00	0.00	3	395.72	Smooth musc	Germ Cell	Blood
189	813552	AA455448	25.65	337.42	13.15	3.00	1.00	3	395.72	Smooth musc	Germ Cell	Blood
193	363377	AA019591	11.01	64.86	5.69	1.00	0.00	7	427.43	Synovial mem	Stomach	CNS
201	506412	W20275	132.74	900.13	7.23	1.00	0.00	17	372.88	Placenta	Lung	Brain
202	68333	T66828	6.98	35.59	5.10	1.00	0.00	5	572.03	Aorta	Heart	Uterus
203	245000	N76278	22.03	125.65	5.70	3.00	0.00	22	79.48	Pool	LID not found	Other
207	121994	T98244	8.31	44.02	5.29	1.00	0.00	1	70.87	Stomach	Prostate	Parathyroid
215	122019	T98320	10.70	57.20	5.35	0.00	1.00	4	0	Placenta	LID not found	Other
217	241392	H81281	33.92	209.27	6.17	2.00	0.00	4	0	Placenta	LID not found	Other
219	207869	H05588	5.62	35.13	8.25	1.00	0.00	4	0	Placenta	LID not found	Other
222	195051	R91137	9.71	48.79	5.02	1.00	0.00	5	322.42	Tonsil	Adrenal gland	Testis
223	240937	H05997	8.74	80.87	6.96	2.00	4.00	5	322.42	Tonsil	Adrenal gland	Testis
227	127185	R08220	41.66	295.18	7.09	2.00	0.00	6	850.09	Pool	LID not found	Other
228	132358	R27329	7.27	48.83	6.69	1.00	0.00	0	457.78	Thymus	Blood	Ear
231	357870	W82594	23.09	125.47	5.00	1.00	0.00	0	457.78	Thymus	Blood	Ear
232	136919	R38459	6.31	35.24	5.58	1.00	0.00	0	457.78	Thymus	Blood	Ear
234	68377	T68907	64.14	3318.74	6.13	2.00	0.00	12	277.88	Smooth musc	Aorta	Muscle
236	138737	R63823	8.74	100.81	11.51	1.00	0.00	1	550.58	Stomach	Germ Cell	Colon
239	286444	W01046	6.03	102.30	16.95	2.00	0.00	5	121.96	Head and nec	Pooled	Pancreas
243	120318	T97119	6.40	46.50	7.26	2.00	0.00	5	121.96	Head and nec	Pooled	Pancreas
244	133130	R28397	10.74	80.32	5.82	2.00	0.00	6	475.48	Head and nec	Pooled	Pancreas
246	144924	R78513	21.71	265.65	12.24	2.00	0.00	6	475.48	Head and nec	Pooled	Pancreas

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247	12126	T96464	26.60	185.68	6.98	5.00	3.00	1	75.41	Pool	LID not found	Other
248	136533	R39745	9.01	48.92	5.40	1.00	0.00			Placenta	Pool	LID not found
249	186818	H43317	1.43	22.38	13.68	4.00	0.00			Pooled	Breast	Ovary
254	132569	R26796	72.02	500.56	6.95	5.00	0.00	14	253.6	Whole embryo	Placenta	
255	122170	T96511	11.05	78.18	7.06	2.00	0.00	7	193.65	Pool	LID not found	Other
258	137647	R37694	2.90	14.73	5.07	1.00	0.00	8	374.68	Pooled	Placenta	LID not found
259	126234	R06362	3.18	25.58	8.01	3.00	0.00			Pool	Ovary	
261	128633	R10185	7.10	38.50	5.43	2.00	0.00	12	14.49	Pancrreas	Pool	LID not found
263	133065	T98528	25.64	237.06	9.25	6.00	0.00	21	225.9			
265	69753	T67652	25.31	165.78	6.55	4.00	3.00	11	54.46	Breast	CNS	LID not found
266	66550	T67022	15.88	126.20	8.05	4.00	0.00	10	475.18	Placenta	LID not found	Other
268	132323	R25464	180.89	1094.00	8.05	3.00	1.00	19	206.56		Thyroid	Muscle
275	121173	R08153	48.56	348.37	7.03	2.00	0.00	6	127.48	Gall bladder	LID not found	Other
278	410633	W06653	18.24	101.94	5.30	1.00	0.00			Pool	Muscle	
281	121161	T99458	179.55	1082.64	6.03	2.00	0.00	20	212.02	Pancrreas	Muscle	Eye
283	246074	N78944	18.38	91.97	5.99	6.00	2.00	6	539.64	Kidney	Pool	LID not found
287	284255	N99839	78.47	702.93	8.96	2.00	0.00			Parathyroid	Pool	LID not found
289	200031	R97154	3.67	24.17	6.59	1.00	0.00			Smooth musc	Testis	Colon
290	245469	N72510	3.23	32.05	9.93	2.00	0.00	1	707.84		Ear	Cervix
292	799858	A4461521	3.12	41.15	13.17	5.00	0.00	22	136.36	Pool	LID not found	Other
296	430153	AA010158	12.49	114.03	9.13	0.00	1.00			Pool	Lung	LID not found
297	264444	W01484	3.19	18.00	5.02	1.00	0.00	11	240.08		LID not found	Other
302	288741	N74055	19.71	119.09	6.04	0.00	2.00			Pool	LID not found	Other
303	110503	T88966	22.10	307.62	13.92	0.00	2.00			Pool	LID not found	Other
305	282865	N63753	7.54	63.74	8.45	0.00	3.00	1	174.05	Pool	LID not found	Other
309	207030	H48360	23.61	135.80	5.30	0.00	1.00	17	307.47		LID not found	Other
311	141768	R70462	13.88	122.97	9.61	2.00	1.00	1	590.63	Testis	Prostate	
316	417251	W87752	8.69	105.10	12.09	0.00	1.00			Pool	LID not found	Other
317	296149	N74360	93.73	682.47	7.28	2.00	3.00			Pool	LID not found	Other
321	196937	R92665	34.76	308.64	6.02	0.00	0.00	7	148.31	Pool	Whole embryo	
323	247194	N54036	3.08	18.66	6.12	2.00	0.00	7	547.88	Pool	LID not found	Other
329	111054	T81374	17.34	131.76	7.60	4.00	1.00	12	222.35	Heart	Blood	Breast
342	295141	W02524	2.08	14.68	7.07	1.00	0.00			Marrow	LID not found	Other
343	148373	H04382	1.89	154.54	81.80	1.00	4.00	1	85.25	Pool	LID not found	Other
345	186222	R62862	37.51	268.59	7.96	4.00	0.00	11	67.01	CNS	Forebrain	Pool
348	239651	H75666	3.55	40.18	11.33	2.00	0.00	12	246.56	Pool	LID not found	Other
350	296168	N74365	17.45	132.42	7.59	5.00	0.00			Ovary	LID not found	Other
355	111264	T84084	3.19	22.61	7.06	3.00	0.00			Brain	LID not found	Other
357	203227	H54022	10.15	55.26	5.84	1.00	0.00	16	381.71	Pool	LID not found	Other
362	244350	N75735	6.71	53.36	7.95	2.00	2.00	15	227.19	Pool	LID not found	Other
363	126438	R06642	38.58	354.88	9.20	1.00	5.00	19	194.27	Pool	LID not found	Other
369	196536	R93007	18.40	376.08	20.44	6.00	1.00	5	540.55	Neural	Kidney	Lung
371	111634	T80981	40.82	266.49	6.53	1.00	2.00			Ovary	Adrenal gland	
373	194307	H50747	9.12	116.99	12.83	2.00	5.00	12	247.33	Synovial mem	Thyroid	Parathyroid
379	201517	R97031	27.38	218.95	7.93	5.00	2.00	6	151.95	Smooth musc.	Parathyroid	Neural
381	109123	T00978	5.99	60.86	10.19	9.00	0.00	X	317.31	Spleen	Thymus	Muscle
384	262053	H98812	66.75	374.62	5.62	0.00	1.00	4	490.87	Esophagus	Uterus	Whole embryo
392	770868	AA434487	6.01	32.14	5.35	1.00	0.00	1	96.87	Esophagus	Stomach	Larynx
403	211206	H67968	19.59	103.50	5.28	1.00	0.00	10	421.81		Colon	Adrenal gland
412	233457	H65129	5.31	36.08	6.80	1.00	0.00					
414	50182	H17862	5.08	76.05	15.44	2.00	0.00					
419	234907	H73080	49.24	723.63	15.00	2.00	0.00					
423	123780	R01428	12.73	106.43	8.36	1.00	4.00					
427	753313	AA410255	7.78	86.78	11.15	3.00	0.00					
446	833596	AA465743	20.09	441.68	21.88	2.00	0.00					

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450	510032	AA053051	9.68	52.00	5.37	1.00	0.00	17	126.91	Adipose	Colon	Kidney
452	720112	AA411244	5.50	43.21	7.86	9.00	0.00	2	576.49	Ovary	Testis	Pool
460	153411	R47979	103.88	1438.51	13.63	6.00	0.00	6	117.99	Lymph node	Lymph	Small intestine
472	144034	R77251	6.95	49.61	5.57	1.00	0.00	6	544.54	CNS	Thyroid	Cervix
475	763692	AA408601	51.39	322.04	8.27	1.00	0.00	10	510.68	Nose	Pooled	Stomach
485	840364	AA485628	76.01	443.38	5.83	1.00	0.00	X	87.90	Ear	Done	Forebrain
490	713960	AA4264328	4.15	52.21	12.57	1.00	0.00	5	353.54	Bone	Ear	Adrenal gland
498	11463	H21071	74.83	486.06	6.50	2.00	0.00	15	340.51	Colon	Pool	LID not found
504	198584	R95132	125.76	1238.62	9.85	1.00	0.00	14	271.74	Tonsil	Blood	Thymus
513	824074	AA491227	12.70	94.86	7.41	3.00	0.00	11	264.42	Pooled	Placenta	Thymus
520	144740	R76228	4.18	40.44	9.67	2.00	0.00	2	576.49	Pooled	CNS	Forebrain
527	342553	W68537	4.62	78.81	16.61	6.00	0.00	11	40.11	Pooled	Breast	Parathyroid
528	66336	T68833	7.00	35.19	5.03	1.00	0.00	10	42.59	Nose	Aorta	Ear
536	350885	W94714	6.25	125.76	20.11	1.00	0.00	3	459.05			
557	32644	R43544	691.72	4076.06	5.89	1.00	0.00	4	644.84	Gall bladder	Eye	Bone
564	830559	AA457176	195.25	1429.40	7.21	6.00	2.00	14	15.32	Synovial membrane	Skin	Skin
565	897835	AA598582	92.00	537.51	5.84	1.00	0.00	14	510.47	Peripheral nerve	Nose	Pancreas
571	626502	AA168155	37.77	303.69	8.04	3.00	0.00	9	410.77	Breast	Tonsil	Aorta
575	814460	AA459247	5.28	28.23	5.36	1.00	0.00	7	107.35	Heart	CNS	Brain
581	290039	N78471	4.65	41.62	8.56	4.00	0.00	20	107.35	Heart	CNS	Germ Cell
583	241003	H81010	13.87	336.66	24.28	2.00	0.00	10	360.96			
584	184704	R89804	139.34	975.12	7.00	4.00	0.00			Adrenal gland	Pool	LID not found
597	126237	R08370	3.59	30.07	8.37	2.00	0.00			Pool		
592	194395	R83160	4.96	43.60	6.77	2.00	0.00	14	217.02	Thyroid	Breast	Pool
594	139766	R62242	4.03	23.87	5.95	1.00	0.00	21	146.87	Placenta	LID not found	Other
596	141108	R66219	30.01	315.07	10.50	6.00	5.00	12	22.39	Lymph	Kidney	Testis
599	292171	N79167	37.25	254.39	6.83	1.00	2.00	X	26.02	Pool	LID not found	Other
600	245636	NA9653	21.84	147.82	9.83	3.00	0.00	6	16.54	Larynx	Thyroid	Pancreas
605	154482	R46864	19.67	113.40	5.77	1.00	0.00			Pool	LID not found	Other
608	109523	R81972	14.03	280.23	19.98	10.00	0.00	13	130.78	Pool	LID not found	Other
611	128401	R06568	20.42	148.44	7.27	3.00	0.00	10	529.62			
624	285973	N73551	21.73	297.33	13.69	5.00	5.00	3	188.24	Pool	LID not found	Other
627	126465	R06568	6.32	33.06	6.23	0.00	3.00	17	278.86	Tonsil	Muscle	Spleen
630	120309	T97215	86.73	548.95	6.33	2.00	0.00	1	111.63	Pooled	CNS	Pancreas
639	196960	R93087	7.30	36.47	5.27	1.00	0.00	11	45.26	Prostate	Brain	Pool
640	242778	H93603	19.78	104.65	5.29	2.00	0.00			Pool	LID not found	Other
646	111136	T63558	48.05	391.53	8.15	4.00	0.00			Pool	LID not found	Other
648	199841	R96525	18.22	256.47	14.24	8.00	4.00	10	540.8			
649	325102	W49715	55.50	308.70	5.53	1.00	0.00			Colon	Prostate	Kidney
652	140921	R66585	11.48	113.13	9.85	3.00	4.00	16	185.45	Parathyroid	Forebrain	Thyroid
655	321560	W32864	22.61	144.53	6.39	2.00	0.00	13	135.33			
656	184600	R64242	16.46	171.30	10.41	3.00	0.00	10	107.85	Heart	Placenta	Kidney
660	141230	R66652	5.33	66.65	12.51	4.00	4.00	17	331.17	Epididymis	Breast	Tonsil
662	110507	T82819	83.42	442.60	5.31	1.00	0.00	8	278.83	CNS	Pool	LID not found
664	194687	R64375	56.83	430.88	7.58	5.00	0.00			Aorta	Lung	
665	135873	R31591	38.62	249.43	6.46	4.00	2.00			Placenta	Pool	
667	126509	R06745	4.10	32.22	7.85	2.00	0.00	8	566.46	CNS	Uterus	Eye
673	292522	N91307	28.39	259.39	9.13	1.00	0.00	6	382.37	Pool	LID not found	Other
677	240050	H62330	105.95	601.60	5.60	1.00	2.00			Adipose	Breast	Testis
688	765342	AA453498	7.42	80.23	8.12	3.00	0.00	1	623.7	Lymph	Pool	LID not found
689	207665	H62267	44.34	286.04	6.45	2.00	3.00	14	156.61	Placenta	LID not found	Other
690	135855	R06212	34.89	187.48	5.64	1.00	1.00	9	370.33	Ear	Lymph	Germ Cell
693	292308	N00950	5.06	60.21	11.85	1.00	0.00	3	570.8	Pool	Prostate	Germ Cell
694	212180	H66894	17.47	105.55	6.04	2.00	2.00			Ovary	Testis	Placenta
698	810096	AA464967	3.63	28.47	7.85	2.00	0.00					

Table 2A

695	128260	R09873	3.07	17.78	5.80	1.00	0.00	4	451.92	CNS	Germ Cell	Uterus
696	810104	AA464870	1.35	10.20	7.54	2.00	1.00	15	129.27	Peripheral ner Blood	Brain	Spleen
700	810888	AA458869	3.01	18.86	5.64	1.00	0.00	3	473.39	Pooled	Brain	Pool
702	133378	R85573	4.27	28.10	6.11	1.00	0.00	17	534.21	Cervix	Testis	
703	1030928	AA620346	1.42	7.13	5.02	0.00	1.00			Testis	Testis	LID not found
704	810843	AA458838	5.57	39.10	7.02	5.00	0.00			Thyroid	Spleen	Aorta
706	292812	N90470	102.29	1074.94	10.51	2.00	0.00	X	245.06			
707	824659	AA461302	5.45	46.58	8.55	6.00	0.00			CNS	Germ Cell	Colon
709	240318	H89796	10.25	78.85	7.50	6.00	0.00			Bone	LID not found	Other
710	247635	N58163	39.23	549.46	14.01	6.00	5.00	11	235.26	Synovial mem	Germ Cell	Lymph
711	324225	VW47350	19.74	143.45	7.27	3.00	0.00			Ignore	Colon	Liver
718	321271	AA032410	2.82	33.33	11.83	9.00	0.00			Ignore	Colon	Blood
723	773220	AA425655	15.17	99.17	6.54	2.00	0.00			Small intestine	Gall bladder	Parathyroid
729	293847	N86051	12.28	103.51	8.44	2.00	5.00	X	239.33	Pool	LID not found	Other
739	327247	AA384282	1.12	6.46	5.74	1.00	0.00	7	530.17	Pool	Pool	Placenta
740	810083	AA484962	9.45	105.15	11.12	2.00	0.00	9	119.58	Eye	Ignore	Placenta
741	240874	H80946	41.50	208.27	3.01	0.00	1.00			Prostate	Synovial mem	Skin
745	795798	AA459853	26.14	177.65	6.81	1.00	0.00	1	745.7	Adrenal gland	Parathyroid	Germ Cell
764	364555	AA022801	3.57	36.80	10.84	5.00	0.00			Aorta	CNS	Brain
765	241355	H90355	46.78	457.50	9.78	3.00	2.00			Pool	LID not found	Other
798	151456	H25546	5.22	244.53	48.84	10.00	1.00	11	67.01	Gall bladder	Adipose	Liver
800	179534	H51461	5.80	68.54	11.83	2.00	0.00			Brain	Germ Cell	Breast
805	292813	N85555	31.75	237.99	7.50	1.00	1.00	4	423.35	Ovary	Colon	Pool
816	129148	R10868	80.28	411.33	5.12	0.00	0.00	2	130.74	Thymus	Adipose	Parathyroid
835	593398	AA102870	3.06	23.49	7.99	2.00	0.00	5	631.73	Pancreas	Somach	Breast
843	754031	AA479981	4.32	29.07	6.74	1.00	1.00	12	43.68	Eye	Brain	CNS
844	203137	H81934	5.84	39.73	8.80	2.00	0.00	X	345.45	Bone marrow	Pooled	Placenta
846	135221	R31952	2.34	78.39	33.57	2.00	0.00			Cervix	Placenta	Colon
851	803784	AA454743	3.79	398.88	104.82	16.00	1.00	19	274.67	Ovary	CNS	Colon
854	68731	T64905	1.81	33.71	18.64	1.00	0.00			Whole embryo	Placenta	Germ Cell
858	764479	AA410667	10.24	488.78	47.75	5.00	0.00	1	191.81	Adipose	Skin	Stomach
871	144777	R76263	48.30	252.69	5.23	0.00	1.00	1	539.01	Synovial mem	Adrenal gland	Gall bladder
872	305606	N90246	2.39	58.07	24.30	3.00	1.00	7	855.1	Parathyroid	Liver	Pancreas
878	75923	T47229	32.41	194.29	6.00	1.00	0.00	10	270.14	Parathyroid	Breast	CNS
883	243816	N39161	6.10	64.47	10.56	1.00	0.00			Adipose	Spleen	Placenta
900	836373	AA458801	16.75	198.15	11.83	0.00	2.00	7	449.88	Thymus	Ear	Cervix
905	770937	AA428170	13.13	72.40	5.51	0.00	1.00	13	220.79	Thymus	CNS	Bone
908	66664	T67056	7.48	38.16	5.24	1.00	0.00			Larynx	Pool	Colon
923	50990	H18436	7.30	36.82	5.05	1.00	0.00			Whole embryo	Brain	Testis
924	753862	AA410517	1172.13	6187.71	5.28	1.00	0.00	6	17.79	Cervix	Placenta	Skin
925	770212	AA434115	10.84	360.39	33.25	10.00	0.00	1	671.25	Adipose	Breast	Ovary
927	841332	AA487634	34.60	370.01	10.69	0.00	2.00	12	47.11	Lymph	Bone marrow	Thymus
929	189992	R93124	40.11	375.59	9.37	0.00	1.00			Liver	Esophagus	Synovial membrane
934	85220	T72422	5.52	31.58	5.68	1.00	0.00	4	644.55	Gall bladder	Liver	Pool
940	813830	AA447774	40.44	311.58	7.70	2.00	0.00	8	563.84	Head and neck	Muscle	Ovary
948	40017	R52854	185.04	936.24	5.06	1.00	0.00	7	111.22	Adrenal gland	Thyroid	CNS
954	784876	AA448015	3.03	23.48	7.74	0.00	2.00	10	471.64	CNS	Whole embryo	Testis
956	83231	T68351	3.69	19.90	5.12	0.00	1.00			Liver	Breast	Colon
961	111204	T64382	50.91	402.17	7.90	2.00	0.00	9	357.89	Eye	Pool	LID not found
962	65962	T67085	126.61	693.75	5.50	1.00	0.00			Thyroid	Breast	Pool
964	132848	R25641	5.08	28.44	5.78	2.00	0.00	14	217.02	Thyroid	Heart	LID not found
969	244205	N52980	30.48	200.44	6.67	0.00	3.00			Eye	Colon	Whole embryo
973	711857	AA281189	111.11	671.93	6.05	1.00	0.00	8	166.21		Lung	Breast
974	86400	T68930	68.31	616.50	6.98	3.00	0.00	19	291.14	Breast	Pool	LID not found
985	292416	N91188	14.95	83.13	5.56	1.00	0.00	1	32.1			

Table 2A

989	189458	R91710	27.12	175.18	6.48	4.00	0.00	4	490.05	Prostate	Eye	Fore skin
991	122364	R89145	47.05	333.08	7.08	1.00	2.00	17	372.99	Placenta	LID not found	Other
996	132623	R26813	104.02	678.64	6.52	3.00	0.00	22	71.14	Pool	LID not found	Other
998	204133	R99769	98.44	641.84	6.52	2.00	0.00	17	140.84	Thyroid	Spleen	Adrenal gland
999	122359	T99150	5.35	32.07	6.00	1.00	0.00	8	123.4	Testis	Pool	LID not found
1005	198148	R82352	182.86	1375.47	7.52	3.00	0.00	7	521.82	Pool	Pool	LID not found
1007	127202	R98972	4.36	41.19	9.44	1.00	1.00	6	150.81	Pool	Pool	LID not found
1011	233347	H77533	2.82	15.59	5.52	2.00	0.00	13	157.6	Placenta	Brain	LID not found
1013	201207	R66288	37.43	282.48	7.55	3.00	0.00	3	197.02	Pool	Larynx	Skin
1015	127894	T99011	3.54	24.49	6.92	1.00	0.00	19	82.52	Blood	Placenta	LID not found
1016	154312	R53024	3.94	33.50	8.50	1.00	0.00	4	40.26	Umbilical cord	Uterus	Placenta
1017	123354	R98817	5.79	40.72	7.03	1.00	0.00	3	61.75	Pool	LID not found	Other
1020	133225	R26931	10.47	76.10	7.27	1.00	0.00	19	82.52	Pool	Placenta	LID not found
1021	244329	N75728	35.06	219.10	6.25	3.00	0.00	3	430.49	Germ Cell	Tonsil	Breast
1023	212634	H69048	59.04	437.88	7.42	4.00	2.00	K	245.06	Placenta	LID not found	Other
1024	136108	R53060	10.37	109.96	9.25	0.00	0.00	19	82.52	Blood	Lung	Placenta
1029	110980	T90360	43.18	325.87	7.55	3.00	0.00	4	40.26	Umbilical cord	Uterus	Placenta
1033	293437	R82085	6.95	41.05	5.90	0.00	3.00	3	61.75	Pool	LID not found	Other
1036	133333	R26855	32.01	214.24	6.69	4.00	1.00	19	82.52	Pool	Placenta	LID not found
1038	50214	H16746	1.78	13.27	7.46	1.00	0.00	3	430.49	Germ Cell	Tonsil	Breast
1040	138165	R53900	61.87	409.70	6.64	2.00	0.00	K	245.06	Placenta	LID not found	Other
1041	127076	R07898	17.84	209.29	11.73	5.00	5.00	19	82.52	Blood	Lung	Placenta
1045	127243	R06287	6.75	43.43	6.44	2.00	0.00	4	40.26	Umbilical cord	Uterus	Placenta
1048	138188	R53910	24.19	199.58	8.25	5.00	0.00	3	61.75	Pool	LID not found	Other
1049	126638	R06938	6.16	49.63	8.05	3.00	0.00	3	61.75	Pool	LID not found	Other
1051	123720	R01277	38.35	234.45	6.11	3.00	0.00	1	111.89	Breast	Cervix	Blood
1054	306808	V24055	4.33	40.16	9.27	3.00	1.00	17	429.02	Pool	LID not found	Other
1059	245413	N77203	27.09	628.95	22.84	0.00	5.00	12	47.11	Small intestine	Smooth muscle	Nose
1060	251351	H96213	5.46	66.15	11.28	1.00	1.00	19	82.52	Blood	Lung	Placenta
1062	296189	V02659	16.58	112.20	6.51	4.00	3.00	19	48.71	Blood	Colon	Testis
1063	80334	T65770	1.86	20.07	10.23	2.00	0.00	4	869.93	Pool	LID not found	Other
1065	197051	R63153	57.88	500.84	8.66	4.00	0.00	14	135.79	Pool	LID not found	Other
1067	124271	R02038	1.63	10.32	6.34	1.00	0.00	12	473.2	Pool	LID not found	Other
1068	291459	N72852	7.30	51.41	7.05	3.00	1.00	4	869.93	Pool	LID not found	Other
1069	242644	H94878	2.87	18.35	6.40	2.00	0.00	14	135.79	Pool	LID not found	Other
1070	296330	V03050	17.71	94.24	5.32	1.00	1.00	12	473.2	Pool	LID not found	Other
1073	197093	R02412	12.23	84.11	6.88	3.00	0.00	4	350.76	Pool	Heart	LID not found
1074	245556	N77223	55.16	407.65	7.39	1.00	2.00	7	458.83	Aorta	CNS	Brain
1075	124795	R16769	12.74	178.01	13.96	2.00	2.00	1	119.16	Heart	Ovary	Pool
1076	296334	V03052	23.32	129.45	6.65	1.00	0.00	7	458.83	Aorta	CNS	Brain
1081	236637	H75490	18.96	175.55	9.28	6.00	0.00	1	119.16	Heart	Ovary	Pool
1083	295527	N74942	60.37	512.31	8.49	3.00	3.00	7	458.83	Aorta	CNS	Brain
1085	245936	N76803	2.43	23.11	9.51	1.00	0.00	1	119.16	Heart	Ovary	Pool
1106	297843	N62328	3.17	17.94	5.66	1.00	0.00	16	482.73	Small intestine	Adipose	Nose
1111	187816	R83758	2.99	58.67	18.95	6.00	1.00	8	334.17	Pool	LID not found	Other
1113	194593	R34893	3.26	16.73	5.13	1.00	0.00	5	578.76	Pool	LID not found	Other
1115	136874	R39705	43.22	287.22	6.65	2.00	2.00	11	41.44	Lymph	Heart	Breast
1120	799604	A4460003	1.43	12.57	6.80	1.00	0.00	4	450.16	Pool	LID not found	Other
1121	292568	N91330	80.03	465.59	5.76	1.00	0.00	1	711.38	Testis	Placenta	Pool
1126	295321	V04369	18.15	93.86	6.15	1.00	0.00	11	41.44	Lymph	Heart	Breast
1127	198282	R82609	6.44	37.80	5.87	1.00	0.00	4	450.16	Pool	LID not found	Other
1129	194338	R94212	9.24	113.38	12.27	3.00	5.00	1	711.38	Testis	Placenta	Pool
1130	246144	N55492	24.28	166.77	7.69	5.00	0.00	11	41.44	Lymph	Heart	Breast
1137	180226	R94601	18.08	128.78	7.18	5.00	0.00	4	450.16	Pool	LID not found	Other
1139	194155	H51056	7.82	43.88	5.54	1.00	0.00	1	711.38	Testis	Placenta	Pool

Table 2A

1140	782217	AA431988	3.50	28.76	8.21	4.00	0.00	1	143.55	Colon	Testis	Prostate
1142	297411	W03872	20.92	140.00	6.69	5.00	4.00	6	458.69	Kidney	Pool	LID not found
1148	202337	H53156	27.14	235.68	8.68	1.00	3.00			Brain	Pool	Blood
1151	210370	H75531	357.40	1974.00	5.52	1.00	0.00	17	24.51	Adipose	Bone	Blood
1152	266515	H85141	1.83	10.29	5.61	2.00	0.00			Bone	Whole embryo	Pancreas
1164	787183	AA424575	9.90	37.68	6.42	2.00	1.00	3	422.37	Lymph	Tonsil	Blood
1168	296988	R70349	12.50	68.30	5.47	2.00	0.00			Pool	Heart	LID not found
1174	154015	R48796	123.44	713.75	5.78	2.00	0.00					
1184	563444	AA112660	224.35	1858.11	8.28	2.00	0.00	16	480.32	Cervix	Stomach	Lung
1191	130153	R21814	28.66	211.73	7.39	1.00	1.00	18	235.13	Nose	Synovial mem	Thyroid
1195	212640	R52789	44.90	285.97	6.37	1.00	4.00	16	423.94	Spleen	Lymph	Tonsil
1202	244188	N52674	10.02	73.50	7.33	4.00	0.00	X	351.05	CHS	Prostate	Colon
1203	677990	AA336817	11.49	332.30	5.40	1.00	0.00	X	320.23	Ear	Gall bladder	Blood
1208	233721	H79047	115.33	783.08	6.88	1.00	0.00	2	968.45	Liver	Ovary	Spleen
1222	813178	AA456321	13.06	211.38	16.16	3.00	0.00	12	397.89	Ear	Prostate	Eye
1227	245970	N52293	107.40	782.42	7.28	2.00	0.00	4	71.55	Gall bladder	Pooled	Forebrain
1228	295729	W02285	15.92	93.15	5.85	1.00	0.00			Gall bladder	Adipose	Aorta
1231	295680	N31467	26.17	145.88	5.58	1.00	1.00			Ignore	Head and nec	Germ Cell
1232	309041	W24429	2.84	18.78	5.71	1.00	0.00			Brain	Ovary	Lung
1236	740027	AA477514	87.23	582.63	6.88	1.00	0.00	4	619.04	Pool	Lymph	Testis
1240	243399	N48137	3.07	17.85	5.62	1.00	0.00	16	61.77	Larynx	Lung	LID not found
1248	840788	AA486138	19.58	141.71	7.24	2.00	0.00	15	145.79	Eye	Synovial mem	Pancreas
1250	363068	AA018482	4.30	82.85	19.25	7.00	0.00			Bone marrow	Pool	Brain
1261	840493	AA481787	37.98	330.90	8.71	2.00	0.00	2	607	Adipose	Adipose	Breast
1264	297421	W03677	132.17	704.71	5.33	1.00	0.00	1	538.34	Muscle	Muscle	Liver
1265	713782	AA352878	12.27	58.61	8.04	3.00	0.00	19	216	Stomach	Pancreas	Pooled
1271	825478	AA504351	48.80	284.87	6.08	1.00	0.00	20	236.87	Tonsil	Tonsil	Pool
1273	815526	AA558878	18.85	104.91	5.58	0.00	1.00			Skin	Germ Cell	Pool
1279	825577	AA504710	4.57	34.79	7.61	1.00	0.00			Adrenal gland	Placenta	Tonsil
1284	129382	R11238	8.48	43.89	5.78	1.00	0.00	11	253.29	Aorta	Colon	Brain
1289	783728	AA443351	20.42	128.31	8.28	0.00	1.00	17	307.47	Pool	LID not found	Other
1292	199251	R88780	18.05	136.35	7.55	3.00	0.00	3	512.91	Pool	Colon	Colon
1298	887887	AA598884	14.14	173.00	12.23	1.00	0.00	12	25.02	Peripheral ner	Cervix	Muscle
1304	208531	H61979	22.28	292.14	13.11	2.00	0.00	3	157.87	Thyroid	Uterus	Cervix
1311	788334	AA463015	6.67	38.03	5.78	1.00	0.00			Germ Cell	Pancreas	Gall bladder
1313	714105	AA284688	102.66	621.94	6.08	0.00	1.00	4	436.69	Lymph	Uterus	Kidney
1318	503617	AA131405	5.69	81.50	14.33	3.00	0.00	3	340.31	Eye	Tonsil	Ovary
1320	612765	AA455062	37.95	191.67	5.05	1.00	0.00			Placenta	Forebrain	Pool
1330	263200	H99544	17.89	105.27	5.88	0.00	2.00	2	87.96	Eye	Ovary	Thyroid
1331	782811	AA448281	130.33	987.71	5.28	0.00	0.00	3	732.12	Epididymis	Tonsil	Breast
1335	786675	AA451904	17.56	4927.42	280.58	21.00	1.00	X	386.29	Nose	Bone	Placenta
1336	286072	W02558	8.04	59.88	7.48	1.00	0.00			Pool	LID not found	Other
1345	244147	N51018	13.92	78.52	5.64	1.00	0.00	12	385.98	Pool	Brain	Placenta
1349	178232	H50226	3.08	23.17	7.52	2.00	0.00			Pool	Bone	Placenta
1350	128503	R10159	7.33	43.58	5.95	1.00	0.00			Pool	LID not found	Other
1352	194658	R84407	103.88	704.54	6.41	3.00	0.00	18	299.63	Stomach	Germ Cell	Pancreas
1358	140301	RG6924	17.17	145.52	8.48	5.00	4.00			Pool	LID not found	Other
1360	214858	H74032	142.25	984.40	6.78	3.00	0.00	2	245.06	Spleen	Germ Cell	Pancreas
1365	125788	R07684	56.26	358.42	6.37	2.00	0.00	X	75.19	Pool	LID not found	Other
1367	128617	R16478	12.94	68.96	5.30	0.00	1.00			Pool	LID not found	Other
1369	202339	H53038	10.03	56.20	5.60	0.00	0.00	9	252.87	Tonsil	Prostate	Placenta
1371	128568	R08882	37.91	218.55	5.79	0.00	1.00			Pool	LID not found	Other
1372	135239	R87981	6.52	80.26	12.32	5.00	4.00			Pool	LID not found	Other
1375	128827	R16484	33.68	245.63	7.28	4.00	0.00			Lung	Pool	LID not found

Table 2A

1382	200863	R98377	150.20	803.04	5.35	1.00	0.00	15	142.19	Fore skin	Placenta	Stomach
1384	208449	R98738	5.57	31.49	5.66	1.00	0.00	19	73.91	Pool	LID not found	Other
1389	126151	R01451	3.92	19.87	5.07	1.00	1.00			Breast	Pool	LID not found
1393	320630	W31764	5.51	36.06	6.54	1.00	0.00	11	292.28	Parathyroid	LID not found	Other
1396	137760	R68514	74.75	685.14	8.90	3.00	0.00					
1400	242010	H93819	27.74	600.51	21.65	6.00	5.00	19	278.5	Parathyroid	Uterus	Pool
1401	294916	N71457	68.02	407.57	5.99	1.00	2.00	17	269.7	Kidney	Colon	Testis
1402	274932	R64636	3.51	23.16	8.90	1.00	0.00				LID not found	Other
1404	137767	R68245	72.34	605.29	8.34	5.00	0.00	5	528.2	Pancreas	Uterus	Germ Cell
1406	136354	R63735	16.99	114.43	6.74	3.00	0.00				Kidney	Tonsil
1416	195720	R93157	11.00	64.99	5.91	3.00	2.00	1	712.78	Ovary	LID not found	Other
1418	110282	T81988	21.87	176.10	8.05	4.00	0.00	15	286.07	Parathyroid	Aorta	Whole embryo
1419	126984	R07313	4.93	25.54	5.18	1.00	0.00	21	225.9	Pool	LID not found	Other
1422	110987	T90369	111.54	987.64	8.68	5.00	0.00	18	61.8	Pool	LID not found	Other
1424	150481	H47297	19.67	185.11	9.41	4.00	0.00	13	85.51	Placenta	Fore skin	Pool
1428	137665	R68331	15.71	182.89	11.84	6.00	5.00	4	637.68	Placenta	LID not found	Other
1430	203910	H56555	5.13	32.70	8.38	0.00	1.00	16	442.68	Pool	Thyroid	Bone
1432	183200	H47335	63.56	650.81	10.24	3.00	4.00	19	71.09	Adipose	Germ Cell	Pool
1438	122079	R02526	32.03	199.57	5.23	4.00	0.00	2	513.74	Blood	Testis	Pool
1441	210494	H65481	8.02	39.02	8.46	2.00	0.00	3	222.62	Pool	Prostate	LID not found
1442	129800	R16900	1.87	12.41	8.64	1.00	0.00	7	615.41	Fore skin	Kidney	Pool
1445	241475	H90477	36.55	289.85	7.93	4.00	0.00	5	500.36	Nose	Stomach	CNS
1449	210431	H64936	90.85	453.97	5.06	1.00	0.00	13	268.41	Esophagus	Ovary	CNS
1452	322537	W15283	12.82	545.92	42.59	4.00	1.00	20	70.67	Muscle	Prostate	Pool
1453	241497	H60490	38.28	293.84	7.68	4.00	0.00	19	77.18	Placenta	LID not found	Other
1454	282342	R61317	34.54	332.54	9.63	3.00	4.00	1	109.78	Pool	Stomach	Stomach
1456	39974	R54560	5.31	115.60	21.61	6.00	0.00	2	631.89	Smooth muscle	CNS	Stomach
1458	120501	H64972	6.10	54.08	8.66	2.00	0.00	1	711.92	Stomach	Germ Cell	Heart
1460	123546	R01666	34.96	232.53	6.65	1.00	0.00	X	245.06	Aorta	CNS	Placenta
1473	210535	AA434382	122.18	1320.42	10.81	3.00	1.00	11	247.68	Tonsil	Peripheral nerve	LID not found
1479	366665	T80942	62.55	417.41	6.67	3.00	0.00	X	245.06	Bone	Placenta	LID not found
1484	257823	N30639	106.26	670.95	6.31	3.00	0.00	13	239.10	Peripheral nerve	Thymus	Thyroid
1485	240768	H91353	14.27	98.73	6.92	1.00	0.00	12	513.08	Pool	LID not found	Other
1495	810684	AA463972	6.22	34.07	5.48	1.00	0.00	9	400.71	Thymus	Lung	Uterus
1501	241274	H91216	55.83	309.64	5.55	2.00	0.00	17	148.92	Stomach	Testis	CNS
1502	199258	R65827	8.14	41.66	5.12	1.00	0.00		416.28	Pool	Brain	LID not found
1503	809003	AA458483	276.70	1506.42	5.44	1.00	0.00			Pool	Smooth muscle	Thyroid
1505	210565	H69639	102.74	591.69	5.76	3.00	1.00	20	193	Prostate	LID not found	Other
1507	505414	AA158251	1.38	7.07	5.12	1.00	0.00	7	638.71	Whole embryo	Heart	Pool
1508	279399	N48708	4.05	26.75	6.60	1.00	0.00	6	629.01	Pool	LID not found	Other
1510	293510	N65574	40.34	261.52	6.48	3.00	0.00	7	642.13	Ear	Liver	CNS
1528	143756	R75498	8.32	42.28	5.08	1.00	0.00	2	356.2	Umbilical cord	Muscle	Marrow
1528	811028	AA465373	69.42	382.14	5.50	1.00	0.00	19	35.68	Smooth muscle	Tonsil	Blood
1531	244323	N54803	122.56	792.85	8.47	4.00	2.00	22	138.3	Synovial membrane	Umbilical cord	Lymph node
1533	246278	N77096	66.23	489.47	7.38	3.00	5.00	7	526.17	Umbilical cord	Brain	Adrenal gland
1535	325380	AA284285	3.58	28.41	7.83	2.00	0.00	5	421.53	Liver	Colon	
1548	247281	N57964	176.76	1010.53	5.72	1.00	0.00					
1552	207288	H56820	8.53	45.76	5.36	1.00	0.00					
1556	322561	W13277	848.75	7077.92	8.34	2.00	0.00					
1564	123400	T99839	19.25	119.66	6.21	2.00	0.00					
1568	365945	AA065831	5.83	32.20	5.52	1.00	0.00					
1567	35271	R25521	12.28	85.06	6.84	1.00	0.00					
1570	76294	T50788	11.05	96.58	8.74	6.00	0.00					

Table 2A

1571	280586	N69572	21.38	111.89	5.22	1.00	0.00	6	69.75	Spleen	Blood	Liver
1590	123117	R9559	16.52	129.10	6.97	1.00	0.00	7	40.71	Smooth muscle	Nose	Forebrain
1600	34478	R44664	1.07	10.96	10.24	1.00	0.00	9	385.82	Germ Cell	Testis	Ovary
1608	222098	H84113	48.32	396.66	8.27	3.00	0.00	11	228.96	Eye	Bone	Breast
1610	124261	R02348	98.33	617.78	8.41	2.00	0.00	19	269.17	Umbilical cord	Nose	Esophagus
1618	770910	A4433551	2.57	264.36	110.73	22.00	3.00	1	671.44	Esophagus	Adipose	Colon
1636	739901	A4477893	261.52	1440.75	5.12	1.00	0.00	13	86.55	Synovial mem	Blood	Colon
1639	739126	AA421687	11.46	95.99	8.35	2.00	0.00			Cervix	Synovial mem	Marrow
1646	867982	AA359863	34.56	427.57	12.37	5.00	0.00	20	123.04	Peripheral nervous system	Adipose	
1652	949938	AA359877	222.88	2198.56	9.66	1.00	0.00	17	317.13	Adrenal gland	Muscle	Cervix
1653	241474	H50415	68.14	409.18	8.00	1.00	1.00	19	78.13	Neural	Skin	Blood
1655	815285	AA481554	24.00	218.20	9.09	1.00	0.00	11	259.81	Lymph node	Pancreas	
1658	841641	AA487700	134.93	754.05	5.59	1.00	0.00	6	118.59	Trachea	Ignore	Aorta
1672	80109	T63224	13.00	200.07	15.38	8.00	0.00	16	78.05	Trachea	Ignore	Aorta
1674	810850	AA459855	63.93	359.71	5.63	1.00	0.00	7	384.36	Gall bladder	Uterus	Whole embryo
1679	814485	AA459266	6.59	34.82	5.29	1.00	0.00	11	252.9	Pancreas	Pooled	Uterus
1687	591907	AA143436	4.94	67.25	13.60	1.00	0.00	11	373.41	Germ Cell	Testis	Heart
1691	359162	W95340	0.30	56.93	8.92	1.00	0.00	11	471.03	Ovary	Bone marrow	Peripheral nervous system
1692	830740	AA504843	33.81	320.07	9.47	2.00	0.00	16	217.43	Aorta	Forebrain	Ear
1698	762513	AA432030	48.89	418.62	8.59	5.00	0.00	21	317.36	Cervix	Uterus	Pancreas
1699	815542	AA458866	21.56	509.40	23.81	7.00	0.00	13	387.63	Muscle	Adrenal gland	Pooled
1700	765065	AA460460	11.42	72.35	6.33	1.00	0.00	5	39.19	Umbilical cord	Cervix	Esophagus
1701	768168	AA424833	10.20	57.27	5.82	1.00	0.00	22	114.01	Small intestine	Gall bladder	CNS
1703	843312	AA489555	31.51	254.18	8.04	1.00	0.00	X	345.25	Small intestine	Gall bladder	CNS
1714	824070	AA481225	11.30	63.56	5.46	1.00	0.00	8	528.46	Bone	Ear	Umbilical cord
1716	898082	AA559794	177.33	992.01	5.59	0.00	1.00	12	219.19	Stomach	Pooled	Tonail
1720	242578	H94649	6.68	45.86	6.87	0.00	1.00	19	67.5	Tonail	Pancreas	Brain
1721	278547	N43630	4.34	28.92	6.68	3.00	0.00	20	104.97	Pool	LID not found	Other
1729	197474	H52098	5.66	30.08	5.31	1.00	0.00	19	73.14	Pool	LID not found	Other
1733	248705	H59717	14.97	87.18	5.83	2.00	0.00	7	535.67	Whole embryo	Pituitaria	Heart
1737	241824	H93217	10.37	56.53	5.45	1.00	0.00			Lung	Pool	LID not found
1739	120634	T95254	109.50	1086.76	9.78	4.00	0.00			Cervix	Pool	LID not found
1741	124719	R02160	55.90	282.47	5.05	1.00	0.00	12	471.75	Testis	Pool	LID not found
1747	120631	T95236	64.89	478.85	7.37	3.00	1.00	22	17.69	Adipose	Testis	Pancreas
1751	240199	H89537	4.39	43.60	9.93	1.00	0.00	2	508.82	Pool	LID not found	Other
1753	297155	W03972	33.18	211.85	6.38	3.00	1.00	X	245.06	Brain	LID not found	Other
1756	206816	R99285	205.87	1376.11	6.68	2.00	0.00	11	271.39	Pool	Lymph	Uterus
1761	201322	R99985	15.09	115.32	7.04	4.00	0.00	5	596.86	Forebrain	LID not found	Other
1763	120162	T95274	9.20	172.76	16.79	5.00	0.00	7	580.91	Prostate	Pool	Brain
1768	154789	R35406	60.85	339.85	5.58	2.00	0.00	12	130.31	Testis	Pool	LID not found
1772	134719	R28287	7.83	112.75	14.76	3.00	0.00	4	134.94	Pool	LID not found	Other
1773	245319	N76675	5.16	31.53	6.11	1.00	0.00	8	292.64	Pool	LID not found	Other
1781	256283	W04411	16.57	103.79	6.26	3.00	0.00	10	434.43	Stomach	Pool	LID not found
1785	292207	N80622	75.72	761.78	10.06	5.00	0.00			Cervix	Pool	LID not found
1786	67070	T70429	46.44	276.87	5.96	1.00	0.00			Pool	LID not found	Other
1769	120124	T95160	12.95	112.46	8.69	5.00	0.00	7	580.91	Prostate	Pool	Brain
1791	122913	T89094	48.43	358.85	7.41	3.00	2.00	12	130.31	Testis	Pool	LID not found
1762	240638	H90990	3.44	23.62	6.86	2.00	0.00	4	134.94	Pool	LID not found	Other
1763	113488	T79084	13.81	163.65	11.85	6.00	0.00	8	292.64	Pool	LID not found	Other
1765	120823	T85462	3.16	23.26	7.32	5.00	0.00	10	434.43	Stomach	Pool	LID not found
1795	124090	R02710	15.11	102.10	6.76	3.00	0.00			Cervix	Pool	LID not found
1801	185847	R92841	14.11	98.52	6.27	3.00	0.00			Cervix	Pool	LID not found
1802	68423	R15715	49.59	368.39	7.43	4.00	0.00			Cervix	Pool	LID not found
1805	206094	H61608	28.07	258.86	8.22	4.00	0.00			Cervix	Pool	LID not found

Table 2A

1809	208789	H61037	18.90	161.93	8.87	5.00	0.00	0.00	LID not found Other
1811	120173	T95693	3.91	24.88	6.36	1.00	0.00	0.00	Pool
1814	236128	H53732	85.58	558.21	6.45	2.00	0.00	0.00	LID not found
1816	160528	H25019	3.56	42.17	11.84	3.00	0.00	0.00	Lymph
1818	68430	R15709	4.74	22.12	5.22	1.00	0.00	0.00	Breast
1825	190576	R40008	6.50	96.17	11.21	3.00	5.00	0.00	LID not found Other
1828	245452	N55067	13.01	68.48	5.26	1.00	0.00	0.00	Pool
1828	210710	H68883	64.09	424.11	6.82	2.00	0.00	0.00	Pool
1834	217833	N77843	12.32	61.62	5.00	1.00	0.00	0.00	LID not found Other
1837	202492	H53274	28.35	154.92	5.88	1.00	0.00	0.00	Pool
1838	212409	T85990	26.87	177.11	6.39	1.00	0.00	0.00	LID not found Other
1839	214652	N52911	99.41	622.47	6.26	1.00	0.00	0.00	Pool
1841	198582	R94810	5.12	33.31	6.51	2.00	0.00	0.00	LID not found Other
1842	247859	N77652	81.01	616.27	6.36	3.00	0.00	0.00	Pool
1843	194872	R81033	38.53	288.88	7.50	1.00	2.00	0.00	Forebrain
1845	202553	H53262	49.02	304.89	6.22	1.00	0.00	0.00	LID not found Other
1846	122963	R00220	59.94	402.53	6.63	3.00	0.00	0.00	LID not found Other
1849	274634	R94640	32.68	612.12	15.67	6.00	5.00	0.00	LID not found Other
1855	1046522	A4621150	3.41	25.32	7.41	2.00	0.00	0.00	Ear
1859	180573	H22171	4.45	23.63	5.31	0.00	1.00	0.00	Adrenal gland
1861	202704	H53878	285.96	1480.54	5.48	1.00	0.00	0.00	Tonsil
1862	123448	R00688	190.44	1272.50	6.68	2.00	0.00	0.00	Colon
1869	202703	H53553	13.42	113.02	8.42	1.00	5.00	0.00	LID not found Other
1874	246824	N56494	5.08	50.15	9.87	4.00	0.00	0.00	LID not found Other
1875	205417	H59936	28.74	266.28	8.95	4.00	2.00	0.00	LID not found Other
1877	202602	H53920	26.05	219.15	7.60	6.00	0.00	0.00	Ovary
1878	128260	R08860	37.79	288.23	7.83	2.00	0.00	0.00	Pool
1883	232686	H71321	47.88	358.75	7.49	3.00	2.00	0.00	LID not found Other
1889	199229	R95819	7.40	48.35	6.53	5.00	0.00	0.00	LID not found Other
1890	246688	N78301	36.63	443.91	12.12	6.00	5.00	0.00	CNS
1892	143790	R78782	12.03	77.18	6.42	3.00	1.00	0.00	Small intestine
1895	273435	N38882	187.81	854.31	5.09	1.00	0.00	0.00	Gall bladder
1905	199220	R85851	17.87	160.66	8.99	6.00	0.00	0.00	LID not found Other
1907	233379	H78482	85.07	488.63	7.51	4.00	0.00	0.00	LID not found Other
1908	417711	V88967	111.37	651.16	5.85	1.00	0.00	0.00	Lung
1913	199243	R85869	11.23	103.85	9.25	3.00	3.00	0.00	Pool
1915	229330	R79363	163.58	1340.02	7.30	3.00	0.00	0.00	Pancreas
1917	202785	H53904	54.55	320.43	5.87	2.00	0.00	0.00	LID not found Other
1918	165201	R70361	89.10	682.72	7.66	5.00	0.00	0.00	Breast
1920	323917	AA284180	1.46	12.52	8.57	1.00	0.00	0.00	Tonsil
1934	810485	AA457158	9.65	52.33	5.42	1.00	0.00	0.00	Colon
1942	740925	AA478279	7.36	83.08	12.65	5.00	1.00	0.00	Ovary
1951	813426	AA458853	20.62	176.15	8.54	1.00	0.00	0.00	Gall bladder
1952	248261	N78083	2.50	37.43	14.96	8.00	2.00	0.00	Eye
1958	333863	H78484	4.35	28.76	6.62	2.00	0.00	0.00	Spleen
1963	381843	AA001144	44.28	299.05	6.75	2.00	0.00	0.00	Placenta
1968	810213	AA464525	22.60	233.09	10.31	3.00	0.00	0.00	Gall bladder
1987	210522	H65034	5.93	30.56	5.15	0.00	1.00	0.00	Eye
1975	133176	R28423	212.94	1548.07	7.27	1.00	0.00	0.00	Spleen
1978	128159	R11490	5.44	41.96	7.72	1.00	0.00	0.00	Adipose
1980	234011	H66158	19.37	259.81	13.41	4.00	0.00	0.00	Thyroid
2000	381639	W88268	29.87	243.29	8.15	4.00	0.00	0.00	Muscle
2006	126413	R06634	4.92	44.36	8.01	1.00	0.00	0.00	Arteria
2008	381812	AA058857	1.53	7.95	5.20	1.00	0.00	0.00	Placenta
2014	686865	AA233078	5.50	51.37	9.35	1.00	0.00	0.00	NO OBSERVED TISSUES

Table 2A

2034	470379	AA031284	10.20	63.47	6.22	3.00	0.00	3	121.9	Germ Cell	Tonsil
2036	135608	R31395	4.41	32.04	7.27	0.00	1.00	3	117.28	Blood	Brain
2043	41650	R32797	6.51	457.65	53.16	0.00	1.00	7	455.24	CNS	Placenta
2046	840333	AA485401	16.36	108.93	5.93	1.00	0.00	3	113.12	Larynx	Skin
2053	798888	AA480756	47.97	266.65	5.56	1.00	0.00	12	5.34	Ignore	Spleen
2056	340712	W55997	5.05	34.15	6.78	2.00	0.00	11	253.29	Adrenal gland	Fore skin
2061	523555	AA064715	21.72	177.40	8.17	2.00	0.00	19	87.54	Whole embryo	Pool
2063	841008	AA486949	13.71	101.15	7.36	2.00	0.00	1	252.77	Unilateral cord	Thyroid
2070	815629	AA457047	30.58	154.37	5.05	1.00	0.00	3	69.22	Tonsil	Ear
2073	24415	R93556	85.67	501.66	5.86	2.00	0.00	17	53.69	Unilateral cord	Skinn
2081	841340	AA076317	14.27	109.00	7.64	2.00	0.00	6	117.99	Omentum	Larynx
2084	366341	AA025779	4.85	35.01	7.53	2.00	0.00	7	64.81	Thymus	Placenta
2085	511816	AA088745	38.62	204.15	5.29	1.00	0.00	11	271.39	Colon	Pool
2092	140354	R65622	10.48	101.22	9.66	1.00	0.00	18	17.75	Pool	LID not found
2120	193586	H47475	24.52	179.74	7.33	2.00	0.00	5	529.34	Pool	LID not found
2127	129553	R17054	3.67	22.41	6.11	2.00	0.00	5	110.31	Parathyroid	Uterus
2132	141453	R88997	7.43	80.27	10.80	4.00	5.00	4	102.82	Pool	LID not found
2136	193533	H47542	33.47	294.33	8.79	5.00	0.00	19	277.05	Thyroid	Whole embryo
2138	105651	T72691	8.16	44.82	7.29	0.00	1.00	20	336.98	Aorta	Unilateral cord
2142	111004	T90374	60.87	511.71	6.33	2.00	0.00	9	356.18	Placenta	LID not found
2145	294310	N84431	5.63	48.63	8.28	1.00	0.00	9	98.57	CNS	Breast
2148	141765	R99798	5.96	34.36	5.77	5.00	0.00	16	245.06	Kidney	LID not found
2152	233269	H78655	32.09	265.96	8.29	3.00	0.00	X	726.84	Pool	LID not found
2156	142387	R69834	144.43	1282.55	8.68	1.00	0.00	3	241.3	Ovary	Nose
2160	160617	H47929	3.69	21.37	5.80	3.00	0.00	12	58.84	Ear	Thyroid
2161	275288	R94591	84.38	700.57	8.30	5.00	0.00	15	215.11	Adipose	Parathyroid
2166	298169	N87006	60.95	770.65	9.57	3.00	0.00	12	55.14	Liver	Breast
2189	137387	R38133	5.63	83.92	14.91	3.00	0.00	6	43.95	Blood	Adrenal gland
2171	126799	R07695	46.22	359.21	7.77	4.00	0.00	18	427	Aorta	Fore skin
2178	264973	N88539	16.86	110.38	6.96	1.00	0.00	6	117.99	Pool	LID not found
2180	142532	R70140	12.85	112.24	9.09	1.00	0.00	3	141.89	Breast	Prostate
2183	341805	W60845	12.88	67.31	5.31	1.00	0.00	14	112.35	Pool	LID not found
2184	153713	H46115	5.72	43.03	7.52	2.00	0.00	6	137.73	Pool	Lung
2189	121275	T98731	47.39	333.67	7.04	2.00	0.00	5	357.75	Pool	Whole embryo
2196	155126	R70316	61.78	415.93	6.73	2.00	0.00	14	192.57	Pool	Thymus
2198	111510	T90794	8.21	53.74	6.55	2.00	0.00	14	404.02	Germ Cell	LID not found
2199	188190	R82412	45.38	340.79	7.51	4.00	0.00	17	474.66	Pool	LID not found
2204	240748	H91337	32.24	398.75	12.29	6.00	5.00	8	241.84	Spleen	Pancreas
2208	193724	H47863	17.13	279.24	16.30	6.00	5.00	14	400.27	Bone	Unilateral cord
2213	242084	H85942	25.24	176.78	7.00	5.00	0.00	9	469.28	Fore skin	LID not found
2214	294127	N71385	130.97	1144.60	8.54	3.00	0.00	6	103.36	Germ Cell	Uterus
2216	771133	AA427782	2.17	13.96	8.43	2.00	0.00	8	180.89	CNS	Germ Cell
2217	229651	H65442	54.66	367.61	6.72	3.00	0.00	1	671.44	Skinn	Eye
2223	342522	W68559	1.98	10.18	5.12	1.00	0.00	1			
2226	206988	H45388	5.02	28.44	5.67	1.00	0.00	1			
2232	809552	AA456558	2.67	30.26	11.32	6.00	0.00	1			
2234	324342	W47578	8.63	43.63	5.08	1.00	0.00	1			
2235	1048291	AA620759	4.23	45.28	10.70	4.00	0.00	1			
2245	247780	H93604	6.56	62.08	9.45	1.00	0.00	1			
2247	290893	N72009	12.40	103.43	6.34	6.00	0.00	1			
2251	267241	N24581	60.63	337.04	5.06	1.00	0.00	1			
2252	409786	AA454745	108.79	628.25	5.72	2.00	0.00	1			
2254	327223	W15465	31.64	265.18	6.38	2.00	3.00	1			
2255	247982	N34244	163.85	1163.85	7.23	4.00	0.00	1			
2257	292424	N91202	17.17	109.48	6.36	3.00	0.00	1			

Table 2A

232899	H75578	135.71	1157.00	8.53	4.00	0.00	11	104.48	Stomach	Adrenal gland	Aorta	LID not found
128741	R07863	4.04	22.65	5.61	1.00	0.00	13	74	Tonsil	Pool	LID not found	
208264	H65569	4.01	20.77	5.18	1.00	0.00	9	276.55	Whole embryo	Germ Cell	Pancreas	
292392	N63390	4.69	23.55	5.03	1.00	0.00	9	85.4	Pool	LID not found	Other	
211878	H68724	12.87	78.72	6.07	2.00	2.00	13	352.18	Heart	Breast	Heart	
144654	R55184	4.36	66.62	16.27	0.00	0.00	16		Pool	LID not found	Other	
126355	R66544	30.98	208.48	6.67	2.00	0.00						
122889	R00151	20.08	158.02	7.88	3.00	1.00						
138801	R53407	4.74	36.34		2.00	0.00	1	56.78	Small intestine	Tonsil	Pool	
243280	H95823	64.16	824.13	8.75	5.00	0.00	13	107.1	Pool	Lung	LID not found	
243280	H95823	64.16	824.13	8.75	5.00	0.00	13	378.73	Blood	Pool	LID not found	
128735	R14602	29.54	258.66	8.76	3.00	1.00	5	457.41	Pool	LID not found	Other	
120383	T96035	3.82	54.07	14.15	3.00	0.00	12	-1.31	Pool	LID not found	Other	
110585	T50201	15.24	158.45	10.27	7.00	0.00	12	246.56	Pituitary	LID not found	Other	
110585	T50201	15.24	158.45	10.27	7.00	0.00	12	428.58	Thymus	Adipose	Totipot	
120883	T86077	5.29	61.32	11.60	5.00	0.00	17	363.96	Pituitary	LID not found	Other	
135084	R31426	137.52	1087.72	7.91	3.00	0.00	14	281.08	Pool	LID not found	Other	
306906	AA026562	51.69	513.37	9.69	4.00	4.00	7	448.84	Thymus	Skin	Aorta	
137417	R03239	127.80	877.81	0.67	4.00	0.00	1	130.77	Heart	Lung	Pool	
292679	N62895	400.84	2154.88	5.37	3.00	0.00	9	367.84	Ovary	Breast	Pool	
120873	T86215	25.88	185.98	7.19	3.00	0.00	4	495.88	Pool	Brain	LID not found	
245585	N72540	13.52	83.07	6.14	0.00	1.00	6	315.52	Pool	LID not found	Other	
204735	H57242	36.75	344.96	9.39	5.00	0.00	10	310.17	Pool	LID not found	Other	
123459	R00608	4.31	47.87	11.06	1.00	0.00	11	250.51	Pool	LID not found	Other	
214205	H77787	40.13	537.54	13.43	6.00	5.00	9	24.47	Muscle	Heart	Pool	
281064	W03763	2.97	15.00	5.04	1.00	0.00	4	495.88	Pool	Brain	LID not found	
208804	H63760	3.89	22.89	5.89	1.00	0.00	4	495.88	Pool	Brain	LID not found	
197868	H67208	25.79	220.20	8.34	3.00	0.00	6	315.52	Pool	LID not found	Other	
191572	H37880	102.78	630.02	6.13	2.00	0.00	10	310.17	Pool	LID not found	Other	
2613	N48139	20.50	142.27	6.91	5.00	0.00	11	250.51	Pool	LID not found	Other	
2611	H54188	1.57	13.53	6.59	1.00	0.00	9	24.47	Muscle	Heart	Pool	
203036	H4188	1.57	13.53	6.59	1.00	0.00	9	24.47	Muscle	Heart	Pool	
244343	N72321	29.63	204.78	6.81	3.00	0.00	4	102.82	Pool	LID not found	Other	
2612	N95132	78.02	687.42	8.94	3.00	0.00	17	486.39	Pool	Prostate	LID not found	
2622	R91215	78.02	687.42	8.94	3.00	0.00	17	486.39	Pool	Prostate	LID not found	
2625	H72368	3.49	19.26	5.52	2.00	0.00	17	486.39	Pool	Prostate	LID not found	
2627	T83829	7.44	39.45	5.36	1.00	1.00	1	130.77	Heart	Lung	Pool	
2629	H54423	60.77	453.88	7.47	2.00	3.00	9	24.47	Muscle	Heart	Pool	
282471	N81231	41.37	242.75	5.87	2.00	0.00	7	593.58	Pool	LID not found	Other	
180011	R64336	3.61	22.55	5.92	4.00	0.00	7	593.58	Pool	LID not found	Other	
2634	N92138	62.21	373.00	8.00	1.00	2.00	13	228.98	Forelimb	Ear	Pituitary	
271050	N29914	3.14	58.77	16.07	1.00	0.00	8	478.59	Pool	LID not found	Other	
203287	H54609	21.94	135.43	6.17	4.00	2.00	17	68.81	Pool	LID not found	Other	
2638	N57713	172.05	1166.66	6.78	1.00	2.00	7	655.1	Parathyroid	Liver	Pancreas	
2639	N53453	28.31	241.70	8.25	7.00	0.00	7	655.1	Parathyroid	Liver	Pancreas	
2594	R88282	14.95	100.28	6.70	4.00	0.00	7	655.1	Parathyroid	Liver	Pancreas	
2646	N60246	2.28	30.08	13.30	10.00	0.00	7	655.1	Parathyroid	Liver	Pancreas	
2647	N305606	2.28	30.08	13.30	10.00	0.00	7	655.1	Parathyroid	Liver	Pancreas	
2649	H73029	5.33	28.12	5.28	1.00	0.00	7	655.1	Parathyroid	Liver	Pancreas	
2650	N294311	2.84	15.44	5.45	1.00	0.00	7	655.1	Parathyroid	Liver	Pancreas	
2651	613410	57.11	348.14	6.10	1.00	0.00	8	438.84	Thyroid	Ear	Bone	
2653	203388	H54811	3.70	34.01	9.18	2.00	0.00	8	438.84	Thyroid	Ear	Bone
2654	201203	R89287	158.79	1072.08	6.75	2.00	0.00	16	14.7	Pool	LID not found	Other
2657	198823	R86561	1.99	18.68	9.37	2.00	0.00	16	14.7	Pool	LID not found	Other
202414	H52823	78.26	525.41	8.71	2.00	1.00	1	81.13	Thymus	Colon	Breast	
2662	202414	H52823	78.26	525.41	8.71	2.00	1.00	1	81.13	Thymus	Colon	Breast
2664	244044	N38901	16.16	235.25	15.06	5.00	0.00	1	81.13	Thymus	Colon	Breast
2665	199602	R96566	13.16	92.70	7.05	4.00	0.00	1	81.13	Thymus	Colon	Breast
2668	283306	N91731	41.14	280.22	6.81	1.00	1.00	1	81.13	Thymus	Colon	Breast
2670	248478	N58838	169.64	1068.24	6.30	2.00	0.00	1	81.13	Thymus	Colon	Breast
2673	268787	N74086	20.84	167.00	7.93	4.00	0.00	1	81.13	Thymus	Colon	Breast

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2678	243428	N49439	27.84	193.18	6.99	5.00	3.00	Pool	LID not found	Other
2681	199709	R96954	8.85	45.30	5.24	1.00	0.00	98.76 Ear	Pool	LID not found
2683	305227	W19461	172.06	929.50	5.40	1.00	0.00	631.68 Ignore	CNS	
2685	207440	H60119	13.74	151.69	11.08	4.00	5.00	182.46 Marrow	Ovary	Pool
2686	294995	N99553	191.71	1146.72	5.98	1.00	0.00	371.28	Foreskin	Blood
2687	324815	W49563	9.08	74.88	8.25	1.00	1.00	57.43 Thyroid	Heart	Spleen
2688	115443	T87341	18.22	117.14	6.43	0.00	2.00	701.1 Germ Cell	Larynx	Pancreas
2689	204335	H59915	91.58	1116.13	12.19	10.00	0.00	347.38 Thyroid	Muscle	
2696	753775	A4405242	13.19	149.08	11.31	0.00	0.00	58.81 Foreskin	Esophagus	Blood
2702	398864	R52542	8.30	44.79	5.40	1.00	0.00	585.14	Pool	LID not found
2712	122656	T98886	48.48	308.49	6.32	2.00	1.00	308.38 Kidney	Pool	LID not found
2714	741497	AA401137	6.39	446.78	69.88	16.00	2.00	390 Head and nec	Bone marrow	Neural
2716	810891	AA459519	87.81	1099.65	12.52	3.00	0.00	138.07 Eye	Gall bladder	Stomach
2727	24642	T80232	8.66	63.58	7.34	2.00	0.00	Thymus	Whole embryo	Spleen
2731	150793	H24707	21.08	148.31	7.03	0.00	2.00	Tonsil	Breast	
2743	470179	AA025963	12.88	76.40	5.94	3.00	0.00	60.45 Blood	Skin	Stomach
2755	813149	AA456886	11.37	96.21	8.46	3.00	0.00	553.7 Placenta	Eye	Pool
2756	243741	N49829	4.84	265.66	55.06	8.00	0.00	107.37 Ignore	Aorta	Germ Cell
2759	504113	H17876	2.99	18.54	6.21	1.00	0.00	-10.31 Eye	Parathyroid	Whole embryo
2760	823859	AA490668	8.33	52.08	6.23	1.00	0.00	41.94 Ear	Colon	Whole embryo
2762	41565	R86447	3.95	45.07	11.41	2.00	0.00	55.36 Germ Cell	Bone	Lung
2763	261204	H98218	13.30	620.78	46.68	0.00	2.00	Foreskin	Whole embryo	
2778	155718	R72075	4.88	49.41	10.56	0.00	2.00	Liver	Brain	Breast
2783	85509	T71886	5.75	30.52	5.31	1.00	0.00	250.6 Liver	Gall bladder	
2780	815603	AA458889	28.57	134.44	5.06	0.00	1.00	280.97 Tonsil	Bone	Pooled
2799	709527	AA301163	42.21	288.07	6.83	1.00	0.00	414.87	Gall bladder	Adipose
2802	843028	AA488405	9.55	337.35	35.33	9.00	0.00	24.9 Ovary	Cervix	Pancreas
2812	136602	R36175	19.30	156.71	8.12	3.00	0.00	Placenta	LID not found	Other
2813	207029	H44420	653.05	4603.26	7.05	2.00	0.00	230.18 Pericardial ner	Thymus	Thyroid
2815	51702	H22886	47.23	253.67	5.37	0.00	1.00	458.37 Small intestine	Foreskin	Muscle
2819	40580	R53130	4.88	25.65	5.26	1.00	0.00	144.44 Whole embryo	Brain	Pool
2820	195200	R97296	7.97	40.67	5.10	1.00	0.00	249.3 Pool	LID not found	Other
2821	22731	T75041	14.65	465.42	31.13	2.00	0.00	Pericardial ner	Ear	CNS
2824	131365	R23089	16.85	96.06	5.70	3.00	2.00	Placenta	LID not found	Other
2829	703581	AA378759	81.01	710.68	8.77	0.00	1.00	352.25 Bone marrow	Nose	Aorta
2830	84820	T74606	145.69	648.43	5.83	0.00	1.00	199.83 Aorta	Spleen	
2832	212772	H70099	4.82	38.61	8.01	2.00	0.00	147.41 CNS	Uterus	Tonsil
2838	814054	AA466479	5.28	43.37	8.25	5.00	0.00	619.8 Umbilical cord	Gall bladder	Thymus
2850	786757	AA460727	96.74	632.23	6.64	0.00	1.00	Thymus	Skin	Umbilical cord
2852	248543	N77515	104.96	620.12	5.91	3.00	0.00	245.8 Aorta	Heart	Whole embryo
2860	471196	AA034213	73.56	426.01	5.78	1.00	0.00	Esophagus	Heart	Aorta
2866	712023	AA281616	3.09	16.09	5.21	0.00	1.00	432.9 Adipose	Breast	Tonsil
2882	123408	R00395	20.55	116.71	5.83	3.00	0.00	Germ Cell	Pool	Tonsil
2893	127096	R09109	10.81	66.23	6.13	1.00	0.00	Pool	LID not found	Other
2898	242687	H93550	4.17	25.20	6.05	1.00	0.00	180.04 Small intestine	Head and nec	Placenta
2892	142733	R71414	4.91	32.70	6.66	1.00	1.00	218.82 Pool	LID not found	Other
2893	327506	V32731	47.97	281.72	5.87	3.00	0.00	264.32 Tonsil	Uterus	Testis
2896	206271	H53791	4.78	29.59	6.24	3.00	0.00	378.6 Prostate	Pool	LID not found
2897	282612	N90366	142.16	1082.50	7.61	2.00	0.00	362.64 Testis	Pool	Brain
2898	109030	T77812	3.22	20.05	6.22	3.00	0.00	Breast	Whole embryo	Tonsil
2908	159770	R72681	26.97	157.44	5.84	5.00	0.00	635.66 Pool	LID not found	Other
2920	207990	H60503	9.74	101.78	10.45	6.00	3.00	Pool	LID not found	Other
2923	127116	R08275	14.93	110.80	7.42	4.00	4.00	Placenta	LID not found	Other
2924	141522	R73075	9.88	67.30	8.76	1.00	2.00	Pool	LID not found	Other
2928	197637	R87194	137.97	907.45	6.58	4.00	0.00	Pool	LID not found	Other

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3203	703232	AA450227	55.13	485.26	5.48	0.00	1.00	550.58	Marrow	Synovial men	Cervix
3207	814306	AA453316	24.32	217.83	8.86	3.00	0.00	400.57	Small intestine	Smooth	Pancreas
3209	28475	R13434	28.16	158.75	5.63	1.00	0.00	189.87	Small intestine	Smooth	Pancreas
3214	873590	AA497051	8.06	136.70	16.97	9.00	1.00	191.31	Prostate	CNS	Lung
3217	42373	R67147	2.00	19.14	8.59	2.00	0.00	207.23	Larynx	Nose	Pancreas
3220	897770	AA598508	16.06	632.20	39.37	13.00	1.00	118.71	Synovial men	Skin	Esophagus
3222	592801	AA160852	4.54	94.31	20.34	4.00	0.00	373.87	Thymus	CNS	Spleen
3231	875934	AA496837	41.59	230.99	5.55	1.00	0.00	219.22	Tonsil	Nose	Gall bladder
3234	809598	AA442984	31.29	206.43	6.60	2.00	0.00	99.33	Cervix	Thyroid	Breast
3241	247818	N73030	53.87	284.92	5.29	1.00	1.00	546.17	Adipose	Thyroid	Bone
3242	80109	T63324	16.89	279.39	16.74	7.00	0.00	11.08	Lymph	Adrenal gland	Whole embryo
3245	755508	AA419108	108.83	567.02	5.21	0.00	1.00	111.95	Whole embryo	Pancreas	Pituitary
3247	767345	AA418564	7.17	44.04	6.14	2.00	0.00	380.27	Pool	LID not found	Other
3250	824847	AA490920	19.55	103.99	5.32	1.00	0.00	246.56	Testis	Colon	Heart
3252	841684	AA487580	187.19	1085.64	6.37	0.00	1.00	97.09	Thymus	Prostate	LID not found
3253	716097	AA448755	32.66	257.47	7.88	0.00	1.00	411.43	Pool	LID not found	Other
3254	544639	AA074677	13.25	115.35	8.71	4.00	0.00	245.06	Prostate	LID not found	Other
3255	202168	H92361	3.03	34.92	11.51	4.00	2.00	343.06	Prostate	LID not found	Other
3256	136021	R63187	10.54	72.86	6.92	3.00	0.00	188.44	Prostate	LID not found	Other
3257	121230	T98708	8.92	38.13	6.22	1.00	0.00	531.65	Whole embryo	Pool	Stomach
3271	196214	R92577	12.55	157.22	12.53	2.00	0.00	191.33	Adipose	Prostate	LID not found
3272	207098	H46502	307.87	2228.97	7.24	5.00	0.00	246.06	Pool	LID not found	Other
3273	246073	N55593	72.28	552.40	7.64	4.00	0.00	97.09	Thymus	Prostate	LID not found
3276	134229	R31985	3.44	22.15	6.44	1.00	0.00	411.43	Pool	LID not found	Other
3279	123506	R00528	4.61	44.43	9.64	3.00	0.00	245.06	Prostate	LID not found	Other
3283	121355	T98760	16.50	126.34	7.81	4.00	1.00	188.44	Prostate	LID not found	Other
3285	292452	N86424	70.88	454.30	5.80	2.00	0.00	531.65	Whole embryo	Pool	Stomach
3287	123817	R00648	188.14	1165.32	6.19	3.00	0.00	191.33	Adipose	Prostate	LID not found
3291	121341	T986870	6.49	37.92	5.85	2.00	0.00	97.09	Thymus	Prostate	LID not found
3295	121024	H65775	28.50	208.43	7.31	4.00	0.00	411.43	Pool	LID not found	Other
3296	139764	R62241	105.10	691.48	6.62	1.00	0.00	245.06	Prostate	LID not found	Other
3301	120544	T95553	2.25	11.35	5.04	1.00	0.00	188.44	Prostate	LID not found	Other
3304	139535	R62288	10.58	83.44	7.90	4.00	0.00	531.65	Whole embryo	Pool	Stomach
3307	121412	T98909	43.61	311.39	7.14	4.00	0.00	191.33	Adipose	Prostate	LID not found
3315	121415	T98919	12.00	98.20	8.18	0.00	2.00	246.06	Pool	LID not found	Other
3317	358182	W95346	5.20	57.48	11.04	1.00	0.00	97.09	Thymus	Prostate	LID not found
3318	307255	W21482	9.09	65.35	7.19	5.00	0.00	411.43	Pool	LID not found	Other
3320	142884	R71190	4.16	60.30	14.50	5.00	2.00	188.44	Prostate	LID not found	Other
3322	281987	N24268	28.01	163.04	5.64	2.00	0.00	531.65	Whole embryo	Pool	Stomach
3323	207379	H56894	70.32	459.49	6.52	3.00	0.00	191.33	Adipose	Prostate	LID not found
3329	470379	AA031398	8.23	71.20	8.65	3.00	1.00	246.06	Pool	LID not found	Other
3332	136450	R32751	97.58	883.38	9.05	4.00	0.00	97.09	Thymus	Prostate	LID not found
3336	138999	R42653	5.77	32.68	5.67	1.00	2.00	411.43	Pool	LID not found	Other
3340	135454	R32754	6.77	39.47	5.83	1.00	0.00	246.06	Pool	LID not found	Other
3343	244058	N45440	3.36	22.13	6.58	0.00	2.00	188.44	Prostate	LID not found	Other
3347	121208	T97078	15.25	105.16	6.89	4.00	2.00	531.65	Whole embryo	Pool	Stomach
3348	135203	R32839	13.55	74.36	5.49	0.00	3.00	97.09	Thymus	Prostate	LID not found
3353	107033	R98368	81.26	418.10	6.15	1.00	0.00	411.43	Pool	LID not found	Other
3361	295600	N66843	6.53	54.17	8.29	7.00	0.00	439.12	Pool	LID not found	Other
3365	204098	H55897	55.60	1040.08	18.71	8.00	5.00	373.94	Pool	LID not found	Other
3368	295324	W04231	78.49	541.43	5.61	2.00	0.00	249.17	Uterus	Synovial men	Kidney
3369	487819	AA043464	3.41	17.55	5.15	1.00	0.00	353.88	Forebrain	LID not found	Other
3374	233214	H75898	116.64	721.17	6.18	1.00	0.00	322.26	Nose	LID not found	Other
3377	201519	R97269	7.31	112.00	15.33	4.00	2.00	97.09	Thymus	Prostate	LID not found
3381	203781	H56207	50.48	288.06	5.90	1.00	0.00	322.26	Nose	LID not found	Other

Table 2A

303515	N94385	2.64	45.06	17.09	2.00	0.00	19	101.92	Ignore	Bone	Pancreas
298010	N97041	78.50	428.36	5.46	1.00	0.00			Forebrain	Eye	Heart
304133	W73792	112.51	704.79	8.26	1.00	0.00			Pancreas	Colon	Heart
30390	H80958	14.08	90.95	6.46	5.00	1.00			Pool	LID not found	Other
343646	W69471	1.09	8.98	8.27	1.00	0.00	17	347.35	Gall bladder	Heart	Uterus
300418	R97234	23.46	228.54	9.74	0.00	3.00	3	461.06	Pool	LID not found	Other
108330	W70850	1.49	15.29	10.25	3.00	0.00			Adipose	Testis	Breast
203605	H96424	14.15	89.25	6.94	6.00	1.00	17	272.44	Pool	LID not found	Other
243460	N48213	22.41	136.79	6.10	2.00	0.00			Marrow	Ovary	Blood
245388	N54993	12.82	265.33	20.69	6.00	5.00	15	263.15	Pool	LID not found	Other
100040	H38088	24.42	178.76	6.29	1.00	0.00			Cervix	Stomach	Forebrain
203850	H56438	28.60	200.93	7.03	4.00	0.00	10	176.79	Pool	LID not found	Other
3408	N91997	5.30	31.43	5.94	2.00	1.00			Pool	LID not found	Other
758356	AA04288	9.57	59.37	6.20	1.00	0.00	4	444.67	Head and neck	Thymus	Eye
263356	N82034	86.84	593.71	8.13	3.00	0.00	20	193			
203956	H56879	2.51	17.91	7.14	1.00	0.00	14	106.8	Pool	LID not found	Other
264167	W01983	19.46	111.09	5.71	2.00	0.00					
135220	R32844	26.97	148.06	5.49	1.00	0.00	2	468.83	Peripheral nervous system	Ovary	Ovary
234469	H95358	6.83	36.19	5.30	1.00	0.00			Pool	LID not found	Other
343194	H94571	3.34	17.83	5.27	0.00	1.00			Pool	LID not found	Other
204558	H56881	51.27	368.39	7.21	3.00	0.00			Pool	LID not found	Other
206781	R88074	12.85	156.14	12.35	6.00	5.00					
267437	W03666	43.11	357.35	8.29	3.00	0.00					
344588	W73140	2.78	102.48	36.91	6.00	1.00	4	134.84	Pool	LID not found	Other
310034	W24161	6.82	47.02	6.90	4.00	0.00			Larynx	Heart	Testis
292035	N92035	26.05	163.02	6.26	1.00	0.00			Unilateral cord	Forebrain	Prostate
3450	H65811	39.52	232.23	6.88	1.00	0.00	12	500.87	Blood	Total	Whole embryo
229540	H57017	42.09	283.42	6.13	3.00	0.00			Pool	LID not found	Other
183476	H45817	35.02	384.82	10.99	3.00	0.00			Bone marrow	Skin	Breast
134270	R31168	24.16	430.88	17.93	1.00	1.00	1	695.02	Small intestine	Thyroid	Parathyroid
767638	AA418251	3.03	25.64	8.47	1.00	0.00	7	182.22	Thyroid	Unilateral cord	Pool
758480	AA436408	7.11	48.64	8.84	2.00	0.00	17	325.76	Whole embryo	Liver	Tonsil
810083	AA455021	2.84	22.95	8.10	1.00	0.00	16	26.14	Cervix	Blood	Lymph
134748	R28284	40.70	207.56	5.10	1.00	0.00			Blood	Kidney	Muscle
136188	R33154	8.84	1008.01	102.48	4.00	1.00	4	34.95	Uterus	Heart	Placenta
49518	H15707	196.87	1000.80	5.08	1.00	0.00	6	367.23	Smooth muscle	Unilateral cord	Pancreas
288596	N62820	24.35	298.90	12.19	2.00	1.00	1	736.14	CNS	Eye	Colon
234191	H64324	19.88	143.44	7.80	1.00	1.00	2	120.76	Adipose	Tonsil	Bone
132122	R26070	15.52	93.92	6.05	1.00	0.00	1	132.96	Forebrain	Bone	Brain
753467	AA408551	19.44	195.97	10.08	0.00	1.00	1	142.88	Adipose	Nose	Nose
261971	N27227	0.83	7.92	9.54	1.00	0.00	16	490.28	Larynx	Adrenal gland	Germ Cell
399558	AA025631	13.90	71.52	5.15	0.00	1.00	5	524.67	Smooth muscle	Pancreas	Pancreas
734509	AA410591	6.56	48.84	7.41	1.00	1.00	7	554.6	Forebrain	Pool	Placenta
199843	R97086	44.83	572.27	12.77	1.00	2.00	20	212.78	Placenta	Lymph node	Aorta
236880	W01240	20.92	105.51	5.64	1.00	0.00	X	354.25	Thyroid	CNS	Liver
200814	R98851	9.24	107.84	11.88	1.00	2.00	3	571.11	Small intestine	Smooth muscle	Kidney
652627	AA085597	39.89	231.92	5.81	1.00	0.00	3	880.68	Thymus	Forebrain	Gall bladder
841278	AA488386	13.35	146.85	11.00	2.00	0.00			Parathyroid	Adrenal gland	Lung
104021	H12312	21.72	197.39	9.09	3.00	3.00	4	249.05	Placenta	Tonsil	LID not found
292731	N91426	25.94	157.35	6.07	1.00	1.00			Cervix	Ovary	Kidney
122822	T99688	28.51	188.38	6.91	0.00	2.00	17	96.5	Gall bladder	Stomach	Adrenal gland
112965	T87139	24.87	140.54	5.63	1.00	2.00			Blood	Total	Pool
842663	AA489261	52.88	307.36	5.80	3.00	0.00	8	493.22	Larynx	Peripheral nerve	Nose
530814	AA070226	107.57	1242.16	6.62	1.00	0.00	5	165.62	Small intestine	Liver	Liver
697669	AA489810	30.52	176.68	5.79	2.00	0.00			Bone	Whole embryo	Eye

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3526	78659	T51182	9.45	54.67	5.78	1.00	0.00	Lymph node	Nose	Ovary
3529	824568	AA490981	14.10	103.31	7.35	2.00	0.00	Prostate	Blood	Breast
3539	844526	AA459588	12.01	123.11	10.25	4.00	1.00	Thymus	Ovary	Blood
3549	122345	T99191	2.44	27.61	11.42	3.00	0.00	Eye	Pool	LID not found
3552	248535	NS9766	44.57	285.36	5.95	3.00	0.00	Testis	Uterus	Testis
3553	469762	AA027864	2.11	19.23	9.11	0.00	2.00	Tonsil	Brain	LID not found
3554	111884	T64896	2.98	14.84	5.00	1.00	0.00	Uterus	Muscle	
3557	275612	R83354	3.97	31.30	7.89	2.00	0.00	Breast		
3564	195358	R89539	23.61	239.05	10.13	5.00	0.00	Whole embryo-		Kidney
3566	207613	H58056	4.73	140.02	29.63	2.00	0.00	Pool	LID not found	Other
3570	121072	T98523	15.40	85.85	5.58	1.00	1.00	Pool		
3572	195361	R88999	29.51	287.86	9.76	3.00	0.00	CNS	Pool	Testis
3574	234316	H85238	51.27	376.68	7.35	4.00	0.00	Pool	LID not found	Other
3588	195553	R81821	11.20	188.27	16.81	8.00	5.00	Pool	LID not found	Other
3591	127514	R08868	46.71	325.72	6.97	3.00	0.00	Pool	LID not found	Other
3596	195946	R82218	8.03	57.89	7.22	2.00	4.00	Pool	LID not found	Other
3599	127542	R08893	35.08	273.00	7.78	4.00	0.00	Bone	Pool	Lung
3700	244290	N75715	20.92	170.05	8.13	3.00	0.00	Pool	LID not found	Other
3704	242011	H83319	81.22	845.51	10.21	6.00	4.00	Pool	LID not found	Other
3706	113431	T76571	16.94	120.58	7.12	2.00	0.00	Pool	Pool	Kidney
3710	111200	T84381	22.65	185.90	7.33	5.00	0.00	Placenta	Pool	LID not found
3711	130758	R22088	4.18	28.71	6.87	4.00	0.00	Pool	LID not found	Other
3712	195764	R69285	25.92	255.51	9.86	5.00	0.00	Pool	LID not found	Other
3713	306969	W25368	4.33	150.87	34.82	17.00	1.00	Esophagus	Breast	Prostate
3715	127943	R09163	38.48	235.87	6.13	2.00	2.00	Thyroid	Parathyroid	Spleen
3719	130791	R22113	13.46	113.53	8.43	6.00	0.00	Foreskin	Pool	Testis
3722	135358	T79129	14.65	110.68	7.56	3.00	0.00	Pool	Lung	Placenta
3727	130801	R22085	29.02	180.51	0.22	2.00	2.00	Breast	LID not found	Other
3730	247710	N81980	7.16	44.65	6.23	3.00	0.00	Pool	LID not found	Other
3732	292496	N81290	7.16	44.65	6.23	3.00	0.00	Pool	LID not found	Other
3736	185668	R89471	4.55	29.41	6.46	3.00	0.00	Pool	LID not found	Other
3739	127710	R09498	98.35	647.47	6.58	3.00	0.00	Pool	Colon	LID not found
3741	470061	AA028041	27.86	155.53	5.58	1.00	0.00	Skin	Heart	Breast
3743	130824	R22239	54.71	366.58	8.70	1.00	1.00	Placenta	Pool	LID not found
3745	234418	H95342	1.76	16.53	9.41	1.00	0.00	Tonsil	Pool	Eye
3747	237391	N30709	60.97	536.61	8.82	4.00	0.00	Parathyroid	Blood	CNS
3750	132871	R37505	13.70	143.05	10.44	3.00	2.00	Adrenal gland	Pooled	
3755	194524	R88333	87.50	522.40	5.97	2.00	0.00	Whole embryo	Testis	Foreskin
3758	248194	N77006	56.38	330.01	5.85	3.00	0.00	Blood	Germ Cell	Placenta
3760	356035	W84612	7.10	50.26	7.07	2.00	0.00	Thymus	Pooled	Acids
3766	247466	N64285	5.48	37.99	10.57	1.00	0.00	Pool	LID not found	Other
3769	355177	AA024866	13.77	78.55	5.58	1.00	0.00	Pooled	Parathyroid	
3769	228697	H71314	4.12	27.39	6.64	2.00	0.00	Pool	LID not found	Other
3772	490755	AA133167	2.70	16.21	6.01	1.00	0.00	Peripheral	ner-Uterus	Brain
3774	248598	N78506	15.47	126.08	8.09	5.00	0.00	Pool	LID not found	Other
3779	428786	AA004671	0.84	5.58	5.92	1.00	0.00	Pancreas	Cervix	Unilateral cord
3783	296095	N73611	13.48	69.37	5.16	0.00	1.00	Unilateral cord	Cervix	Foreskin
3785	213509	H72247	5.17	52.72	10.20	3.00	0.00	Pool	LID not found	Other
3788	811068	AA486443	15.02	81.86	5.45	1.00	0.00	Lymph node	Adipose	Unilateral cord
3790	292770	N63546	3.42	25.89	7.57	1.00	0.00	Stomach	Pooled	Lung
3792	277003	N34967	3.11	20.89	6.76	2.00	0.00	CNS	Parathyroid	Lung
3793	213698	H72280	42.19	265.08	6.28	3.00	0.00	Prostate	Pool	LID not found
3798	293594	N84143	11.62	82.55	7.10	3.00	0.00	Adipose	Pool	LID not found
3800	429799	AA009773	10.37	61.56	5.93	1.00	0.00	Liver	Germ Cell	Colon
3801	215335	H72259	14.24	101.45	7.13	6.00	0.00	Pool	LID not found	Other

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3808	293835	N85107	13.39	138.39	7.53	5.00	0.00	12	485.73	Adipose	Pool	LID not found
3809	214823	H71854	39.33	234.35	6.46	3.00	2.00	5	283.38	Stomach	Umbilical cord	Other
3810	198256	R64456	25.79	186.78	7.63	5.00	0.00					
3822	294740	N69252	10.84	88.38	9.06	1.00	0.00	22	175.48	Pool	LID not found	Other
3828	232559	N80384	9.26	64.38	8.94	1.00	4.00	19	86.07	Epithymis	Brain	Heart
3829	243385	N48130	133.02	756.41	5.69	1.00	2.00					
3830	297019	N70072	35.59	178.78	10.49	0.00	1.00	15	344.93	CNS	Lymph	Parathyroid
3834	212820	H70554	2.53	26.50	10.49	0.00	0.00	20	293.98	Eye	Breast	Parathyroid
3840	320712	V31675	4.40	39.67	9.01	4.00	0.00					
3848	213876	N50014	91.43	897.64	9.82	4.00	0.00	1	830.42	Stomach	Kidney	Tonsil
3852	613707	N50014	4.32	169.71	39.25	0.00	1.00					
3876	721792	AA393408	5.84	63.29	10.83	1.00	0.00	1	247.44	Epithymis	Gall bladder	CNS
3887	288502	N78699	188.72	877.18	5.20	1.00	0.00	1	15.07	Blood	Placenta	Pool
3902	167280	R00744	3.16	22.64	7.16	1.00	0.00	14	278.45			
3908	289337	N92846	19.04	2000.27	105.08	11.00	0.00	2	627.13			
3912	613714	AA453850	54.89	354.12	8.45	1.00	0.00	16	170.16			
3918	114814	T94293	56.45	486.48	8.26	4.00	0.00	15	263.4	Synovial mem	Nose	Blood
3940	841470	AA487346	22.82	169.89	7.51	2.00	0.00	10	426.08	Small intestine	Stomach	CNS
3942	310105	W24246	8.78	37.19	5.48	1.00	0.00					
3944	130843	R22305	2.82	18.94	6.00	1.00	0.00	21	247.7	Stomach	Germ Cell	Breast
3945	301061	V07798	9.88	51.16	5.18	1.00	0.00					
3946	880035	AA598950	76.84	550.84	7.17	2.00	0.00	8	31.44	Thyroid	Small intestine	Skin
3951	134783	R31701	12.86	99.79	7.76	2.00	0.00	1	294.09	Ear	Adrenal gland	Whole embryo
3977	361204	AA017526	8.48	33.28	5.15	1.00	0.00					
3987	841679	AA488699	21.70	276.61	12.75	1.00	0.00	7	675.52	Placenta	Uterus	Kidney
3988	823775	AA490256	18.86	177.19	10.51	1.00	0.00					
4003	825085	AA489246	7.02	195.43	27.84	22.00	1.00	1	339.21	Umbilical cord	CNS	Thyroid
4010	815501	AA458668	7.77	47.44	6.11	2.00	0.00					
4015	712341	AA405000	21.75	483.45	22.22	9.00	0.00	6	634.12	Thymus	Spleen	Thyroid
4016	203132	H54828	11.87	447.40	37.70	6.00	0.00	3	643.74	Smooth musc	Larynx	Esophagus
4025	564050	AA114226	5.52	33.51	6.07	1.00	0.00	9	149.77	Smooth musc	Stomach	Breast
4027	321368	W92272	5.04	41.69	8.27	1.00	0.00	5	388.81	Thyroid	Ear	Parathyroid
4028	68672	T53828	6.48	64.25	9.92	0.00	1.00	16	401.58	Smooth musc	Placenta	Umbilical cord
4032	235155	H79353	7.53	62.04	6.24	3.00	0.00	1	588.78	Stomach	Blood	Placenta
4035	121214	T97080	1.86	10.78	5.43	1.00	0.00	2	650.84	Pool	LID not found	Other
4040	139051	R62028	1.72	16.20	9.42	2.00	0.00					
4043	137793	R68537	4.84	45.25	9.74	1.00	0.00	1	394.85	Placenta	Lung	Kidney
4047	124128	R01348	4.60	38.45	8.36	1.00	0.00					
4049	247801	N71671	125.22	944.82	7.55	5.00	0.00					
4056	137891	R63134	6.50	51.40	7.91	1.00	0.00	4	355.71	Brain	Placenta	LID not found
4060	136114	R33285	4.56	28.58	6.27	2.00	0.00	3	580.21	Adrenal gland	Placenta	Tonsil
4064	137869	R63137	5.87	47.56	8.10	2.00	0.00	19	180.72	Parathyroid	Placenta	Kidney
4067	247218	N59057	25.34	257.17	10.15	2.00	2.00					
4069	347687	V81562	78.85	403.17	5.26	1.00	0.00	4	301.37	Neural	Synovial mem	Skin
4070	308092	N85381	27.55	172.23	6.25	1.00	0.00	8	457.37	Placenta	Germ Cell	Pancreas
4078	201301	R99373	10.66	74.59	8.99	1.00	0.00	19	64.49	Pool		Lung
4085	140197	R66101	3.32	52.85	15.88	3.00	0.00	6	42.15	Head and nec	Pooled	Heart
4088	138679	R63205	6.40	63.89	10.00	2.00	0.00					
4092	135999	R33570	14.14	101.19	7.16	3.00	0.00					
4096	141209	R66533	25.56	253.22	9.81	2.00	3.00					
4099	121501	T97309	12.11	87.50	7.23	3.00	2.00					
4107	121808	T97427	12.68	124.60	9.84	6.00	2.00	1	636.07	Pool	LID not found	Other
4116	135853	R33599	7.53	61.45	8.16	1.00	0.00	4	422.24	Placenta	LID not found	Other
4124	136909	R39730	150.48	1600.38	10.63	1.00	0.00					

Table 2A

4125	480019	AA053285	2.22	18.91	7.63	1.00	0.00	10	45.1	Uterus	Liver	Brain
4129	208049	R98107	21.06	131.81	6.26	1.00	0.00	11	159.87	Pool	LID not found	Other
4130	309605	W30310	4.80	29.05	6.05	1.00	0.00	3	121.68	Colon	Pancreas	Pancreas
4134	120701	T89068	7.57	40.56	5.36	1.00	1.00	15	289.67	Fore skin	Pancreas	Uterus
4137	200780	R98191	12.58	145.94	11.60	4.00	5.00	14	276.5	Pool	Whole embryo	Testis
4139	806883	AA488072	9.23	150.41	16.29	0.00	1.00	10	432.99	Heart	Lung	Pool
4140	261836	H98858	12.97	81.78	6.31	0.00	2.00	10		Small Intestine	Cervix	Gall bladder
4144	726335	AA447368	16.86	116.75	8.93	3.00	0.00	10	439.93	Bone marrow	Larynx	Esophagus
4149	204814	H57111	6.93	53.97	5.87	3.00	0.00	10	494.74	Heart	Testis	Pool
4150	132769	R27412	5.16	42.80	8.30	4.00	0.00	7	160.78	Colon	Muscle	Blood
4151	566598	AA129089	6.98	35.65	5.11	1.00	0.00	3	535.56	Pool	LID not found	Other
4153	230191	H94849	7.65	91.50	11.96	4.00	5.00	10	32.22	Smooth muscle	Adrenal gland	Fore skin
4156	488422	AA046862	7.03	47.35	6.73	2.00	0.00	19	289.86	Pool	LID not found	Other
4157	204688	H57273	8.16	287.13	31.34	7.00	2.00	11	211.28	Smooth muscle	Pancreas	Uterus
4158	345751	W72521	7.76	46.42	5.89	1.00	0.00	3	255.63	Pool	Blood	Blood
4164	204444	AA284234	3.74	23.84	6.32	1.00	0.00	11	18.25	Pool	LID not found	Other
4165	204444	H50001	31.62	189.70	5.37	1.00	0.00	15	434.43	Kidney	Breast	Colon
4171	128532	R10043	3.37	18.09	5.37	1.00	0.00	10		Pool	LID not found	Other
4173	208468	H65231	12.17	107.52	8.83	2.00	4.00	3	198.24	Thyroid	Pool	Heart
4174	205361	H64095	4.18	32.30	7.72	1.00	0.00	3	77.59	Lung	Ovary	Uterus
4175	770593	AA434160	0.63	3.66	5.81	0.00	1.00	1	235.02	Gall bladder	Ovary	Skin
4176	810558	AA464568	87.06	1082.48	12.43	1.00	1.00	19		Aorta	Germ Cell	Pancreas
4178	293500	N94060	5.97	32.51	5.44	1.00	0.00			Fore skin	Germ Cell	LID not found
4180	268211	N25986	3.84	44.67	12.24	4.00	0.00			Aorta	Tonsil	Lung
4189	234647	H77736	9.38	59.93	6.39	5.00	0.00			Peripheral nervous system	Uterus	Uterus
4191	783997	AA446839	18.58	134.35	7.23	1.00	0.00	14	39.28	Umbilical cord	Thymus	Pooled
4192	1048810	AA621342	22.57	394.24	15.65	1.00	0.00	1	615.65	Pool	LID not found	Other
4193	201334	R96391	27.16	282.10	9.64	7.00	0.00			Stomach	Cervix	Stomach
4195	130120	R21425	20.57	106.94	5.20	1.00	1.00	5	473.63	Pancreas	LID not found	Other
4199	139780	R36070	107.78	626.68	5.81	1.00	1.00			117.11	Pool	LID not found
4205	204489	H58574	29.59	289.99	9.60	6.00	5.00	20	96.76	Lung	LID not found	Other
4207	148743	H12777	8.59	63.82	7.43	4.00	0.00	2		Parathyroid	Kidney	Uterus
4208	66491	R18134	5.34	87.51	12.64	2.00	0.00	8	76.87	Pool	LID not found	Other
4209	206882	R98905	19.32	100.72	5.21	0.00	1.00			Pool	LID not found	Other
4210	293875	N94274	12.54	120.05	9.58	3.00	3.00			Heart	Testis	LID not found
4212	277136	N40919	2.48	13.50	5.40	1.00	0.00	4	672.08	Heart	Germ Cell	Kidney
4214	345342	W76845	56.40	323.85	5.74	2.00	2.00	1	61.17	Breast	LID not found	Other
4216	155072	R11993	2.56	74.81	28.10	1.00	0.00	2	318.41	Pool	Uterus	Uterus
4217	206895	H98913	10.72	87.46	8.18	4.00	0.00	11	348.77	Gall bladder	Pancreas	Prostate
4221	207370	H58834	8.87	85.91	7.59	4.00	3.00	2	587.59	Eye	Bone	Pancreas
4225	470393	AA031513	6.34	1316.45	207.73	12.00	0.00	2	45.59	Gall bladder	Kidney	Testis
4228	51428	AA126115	4.84	114.71	23.69	13.00	0.00	20	333.71	Germ Cell	Ovary	Prostate
4235	341310	W58032	7.07	41.82	5.93	1.00	0.00	11	351.63	Umbilical cord	Larynx	Esophagus
4244	727292	AA401893	8.70	87.82	7.81	2.00	0.00	17	371.63	Lung	Eye	Kidney
4246	725850	AA389334	4.31	53.22	12.35	0.00	1.00	17	271.57	Brain	LID not found	Other
4250	585115	AA143201	224.97	1902.36	8.46	0.00	1.00	16	272.9	Thymus	Ovary	Skin
4255	309151	N99243	0.89	5.31	5.35	0.00	0.00	11	261.13	Nose	Bone	Ovary
4256	183200	H44959	68.69	334.70	5.02	1.00	0.00	20	334.7	Ear	Brain	Kidney
4260	72050	T52435	107.26	1045.65	9.76	17.00	0.00	2	262.87	Cervix	Blood	Prostate
4275	741139	AA402207	3.77	243.17	64.45	11.00	2.00	13	78.13	Pooled	Pancreas	Pool
4282	661482	AA227594	2.85	781.29	274.41	1.00	0.00	1	146.12	Spleen	CNS	CNS
4310	643552	W74377	5.38	40.76	7.57	1.00	0.00					
4312	131639	R24635	6.69	671.41	102.26	15.00	0.00					
4320	381931	AA058828	2.22	13.36	6.02	1.00	0.00					
4321	71727	T51350	9.85	55.59	5.64	1.00	0.00					

Table 2A

4322	49873	H28922	0.90	6.47	7.16	1.00	0.00	13	320.7	Synovial mem	Adipose	Breast
4323	787981	AA452376	7.02	46.04	9.84	1.00	0.00	12	277.88	Smooth musc	Aorta	Muscle
4324	124052	R02800	2.82	23.38	8.01	1.00	0.00	7	152.54	Placenta	Other	Eye
4328	132142	R26164	7.16	68.24	9.54	1.00	0.00	14	16.43	Pooled	Bone	Pool
4340	120343	T97139	3.89	22.14	6.17	1.00	0.00	10	526.52	Cervix	Adipose	Adrenal gland
4347	825923	AA185901	23.06	104.27	7.12	0.00	1.00	10	436.45	Head and nec	Stomach	Skin
4351	809464	AA443093	6.07	106.14	17.82	3.00	0.00	1	85.95	Gall bladder	Fore skin	Parathyroid
4360	161992	H26176	45.02	247.82	5.50	1.00	0.00	11	240.08	Neural	Smooth musc	Placenta
4363	797016	AA453565	21.12	118.97	5.63	2.00	0.00	18	170.18	Ear	Head and neck	LID not found
4396	110603	T62817	47.17	339.52	7.20	3.00	0.00	8	439.33	Ear	Adrenal gland	Parathyroid
4397	785605	AA448988	51.23	508.87	8.93	2.00	0.00	7	624.62	Ear	Muscle	Pool
4405	840940	AA406628	282.58	7043.35	24.89	2.00	0.00	15	167.89	Ear	LID not found	Other
4412	140515	R68057	30.54	455.14	14.80	6.00	0.00	11	250.16	Testis	Pool	Whole embryo
4413	361974	AA001449	12.23	323.96	28.49	3.00	0.00	2	198.38	Testis	Prostate	Placenta
4414	72391	T51689	7.94	161.34	20.33	13.00	0.00	9	354.75	Thyroid	Pooled	Eye
4416	246824	N76293	2.16	13.60	6.24	0.00	1.00	8	327.75	Pool	LID not found	Other
4470	135189	R68706	98.85	677.35	8.99	3.00	0.00	1	387.28	Pool	Pool	LID not found
4474	209583	H97748	20.35	173.21	6.51	3.00	0.00	1	81.13	Thymus	Colon	Breast
4478	196981	H63233	65.12	382.12	6.93	1.00	0.00	2	229.2	CNS	Pool	Whole embryo
4482	139250	R68726	26.75	502.50	17.48	6.00	5.00	1	81.13	Thymus	Colon	Breast
4483	194921	R91060	4.37	32.72	7.46	2.00	4.00	2	229.2	CNS	Pool	Whole embryo
4486	251481	H96001	9.54	50.74	5.32	1.00	0.00	1	81.13	Thymus	Colon	Breast
4489	202853	N80491	14.03	188.93	13.47	6.00	0.00	2	229.2	CNS	Pool	Whole embryo
4491	130372	R22420	121.99	615.16	5.04	1.00	0.00	1	81.13	Thymus	Colon	Breast
4492	470348	AA029361	31.62	652.86	20.65	6.00	5.00	2	229.2	CNS	Pool	Whole embryo
4493	296793	W01171	41.02	270.05	18.77	4.00	4.00	1	81.13	Thymus	Colon	Breast
4470	111722	T91086	1.95	11.52	5.90	1.00	0.00	2	229.2	CNS	Pool	Whole embryo
4471	130372	R22420	8.40	32.82	5.14	1.00	0.00	1	81.13	Thymus	Colon	Breast
4477	741841	AA402879	13.06	100.83	7.72	2.00	1.00	1	81.13	Thymus	Colon	Breast
4480	105091	R91244	22.28	407.93	18.31	6.00	5.00	3	684.2	Ear	Pool	Pool
4482	249105	N78103	18.14	157.51	8.23	5.00	0.00	9	404.02	Pool	LID not found	Other
4486	195139	R91271	26.48	380.39	14.16	6.00	5.00	6	569.46	Pool	LID not found	Other
4488	210923	H70962	11.81	63.48	5.52	1.00	0.00	6	569.46	Pool	Placenta	Prostate
4503	130977	R22825	50.11	280.63	5.20	1.00	0.00	6	569.46	Pool	Kidney	LID not found
4507	128983	R10311	2.99	17.48	5.85	1.00	0.00	8	565.78	Pool	LID not found	Other
4510	111825	T84865	32.44	226.10	6.97	1.00	3.00	4	558.69	Fore skin	Pool	LID not found
4512	195974	R92649	32.83	277.38	8.42	1.00	3.00	4	558.69	Fore skin	Pool	LID not found
4517	243405	N48436	177.13	1055.80	5.96	3.00	0.00	1	705.71	Pool	LID not found	Other
4518	298041	W02424	41.53	500.26	12.05	4.00	0.00	17	322.26	Ovary	Pool	LID not found
4521	232723	H72700	56.50	462.82	6.19	2.00	0.00	13	63.11	Pool	Tonsil	Pooled
4529	235020	H73304	55.65	308.83	6.65	1.00	0.00	9	422.75	Blood	Heart	Whole embryo
4531	126238	R08372	10.28	64.93	6.32	1.00	0.00	5	504.31	Placenta	LID not found	Other
4532	504300	AA145640	2.93	15.54	5.31	1.00	0.00	6	150.71	Blood	Pool	Pool
4534	296142	W02530	6.55	33.19	5.07	0.00	2.00	6	381.02	Bone	Eye	Fore skin
4535	341588	W58368	6.33	254.68	30.68	3.00	0.00	6	381.02	Bone	Eye	Fore skin
4542	265314	W23546	134.98	977.10	7.24	3.00	0.00	6	381.02	Bone	Eye	Fore skin
4543	135752	R33082	4.99	43.96	8.82	2.00	0.00	6	381.02	Bone	Eye	Fore skin
4545	244784	N54401	12.56	101.24	8.06	1.00	1.00	6	381.02	Bone	Eye	Fore skin

Table 2A

4550	798198	AA461108	4.89	97.97	20.14	6.00	5.00	13	297.84	Prostate	Pool	LID not found
4551	130027	R19406	127.45	858.30	6.73	3.00	0.00	14	192.68	Lung	LID not found	Other
4556	301678	N79556	45.80	914.31	19.96	6.00	5.00	14	207.23	Pool	LID not found	Pancreas
4561	293960	N96556	73.34	583.30	7.66	5.00	0.00	1	895.13	Pool	LID not found	Pancreas
4562	139558	R62338	3.30	18.00	5.45	1.00	0.00	3	141.89	Germ Cell	Testis	Parathyroid
4563	293180	W00899	51.70	346.25	6.04	1.00	0.00	9	410.91	Eye	CNS	Breast
4565	121420	T97257	49.03	296.34	6.04	1.00	0.00	15	258.04	Synovial mem	Eye	Bone
4567	290788	N49274	4.76	26.00	5.46	2.00	0.00	1	592.88	Thymus	Colon	Aorta
4571	806994	AA457702	3.67	130.14	33.68	4.00	0.00	1	592.88	Adrenal gland	Aorta	Smooth muscle
4573	347038	W61126	5.22	78.40	15.02	10.00	0.00	7	30.06	Tonsil	Pool	LID not found
4579	271038	N34362	14.81	91.74	6.20	1.00	3.00	7	30.06	Pool	Brain	Uterus
4586	121038	H69471	70.98	406.97	5.76	1.00	3.00	5	357.64	Pool	Brain	Uterus
4590	235006	H78130	22.76	262.62	11.54	6.00	5.00	6	129.58	Pool	Brain	Uterus
4593	230180	H74330	28.49	153.65	5.39	3.00	0.00	1	592.88	Adrenal gland	Aorta	Smooth muscle
4605	243940	N46384	9.36	60.98	6.51	1.00	4.00	6	129.58	Pool	Brain	Uterus
4606	344141	W69791	35.47	638.95	17.98	6.00	5.00	11	221.51	Smooth muscle	Testis	Pool
4607	810809	AA458882	9.90	83.87	6.47	1.00	0.00	11	221.51	CNS	Thyroid	Cervix
4612	296578	W02256	3.92	31.84	6.12	2.00	0.00	14	248.31	Pancreas	Uterus	Parathyroid
4626	592243	AA155695	7.89	47.80	6.06	1.00	0.00	3	481.79	Brain	Testis	LID not found
4638	123561	R00622	39.06	387.80	9.42	2.00	3.00	17	405.59	Lymph	Placenta	Ovary
4642	322787	AA065596	6.72	151.19	22.51	1.00	0.00	13	206.41	Umbilical cord	Aorta	Pancreas
4674	770014	AA427687	5.32	28.30	5.32	1.00	0.00	18	411.33	Forebrain	Pancreas	CNS
4684	130541	R22412	63.99	386.28	6.72	3.00	0.00	1	266.38	Small intestine	Eye	Heart
4700	810761	AA480851	7.32	183.05	12.85	3.00	0.00	8	18.54	Larynx	Thyroid	Pancreas
4708	773301	AA425556	9.09	115.85	12.85	3.00	0.00	1	266.38	Small intestine	Eye	Heart
4715	687397	AA235332	54.17	399.84	7.39	0.00	1.00	1	18.54	Larynx	Thyroid	Pancreas
4716	938560	AA450931	165.57	1028.72	6.54	2.00	0.00	1	18.54	Larynx	Thyroid	Pancreas
4722	842836	AA486275	25.47	144.28	5.66	1.00	0.00	1	18.54	Larynx	Thyroid	Pancreas
4729	296198	N74933	15.94	91.14	5.72	1.00	0.00	1	18.54	Larynx	Thyroid	Pancreas
4734	380851	AA056148	17.78	141.22	7.95	3.00	0.00	1	18.54	Larynx	Thyroid	Pancreas
4742	796288	AA460827	5.71	32.71	5.73	2.00	0.00	11	225.28	Head and nec	Thyroid	Blood
4747	814378	AA459039	46.27	1271.99	27.49	7.00	1.00	12	240.98	Bone	Muscle	Pool
4750	814595	AA460908	31.24	178.65	5.72	2.00	0.00	19	233.78	Pancreas	Nose	Parathyroid
4751	724378	AA250771	203.37	1453.55	7.15	4.00	2.00	20	293.34	Smooth muscle	Adrenal gland	Colon
4752	207358	H56873	20.78	150.27	7.23	5.00	3.00	22	154.71	Ovary	LID not found	Other
4753	771198	AA443506	105.79	582.39	5.51	1.00	0.00	1	127.63	Skin	Placenta	Placenta
4754	597540	AA160507	7.94	93.24	11.74	4.00	1.00	11	185.06	Head and nec	Skin	Placenta
4755	787771	AA460330	26.46	146.10	5.13	1.00	0.00	12	227.72	Larynx	Head and nec	Skin
4762	810131	AA464250	40.21	384.60	9.57	3.00	0.00	2	388.44	Smooth muscle	Testis	Placenta
4771	785566	AA452966	32.42	258.88	7.92	1.00	0.00	21	215.71	Thyroid	Omentum	Nose
4772	785975	AA448599	8.61	49.78	5.78	2.00	0.00	6	42.01	Ear	Pool	Adipose
4774	897656	AA398817	12.68	207.32	16.37	5.00	3.00	22	45.84	Germ Cell	Blood	Adipose
4776	199180	R95740	8.91	65.64	7.45	3.00	0.00	6	42.01	Ear	Pool	Adipose
4786	754436	AA410207	13.11	358.01	27.15	6.00	0.00	6	42.01	Ear	Pool	Adipose
4788	38408	RS4050	23.99	285.25	11.09	1.00	0.00	6	42.01	Ear	Pool	Adipose
4789	697655	AA496804	12.35	67.84	5.49	1.00	0.00	2	585.19	Ear	Umbilical cord	Placenta
4796	781362	AA484200	11.91	104.95	8.81	3.00	0.00	2	545.17	Pool	Pancreas	Breast
4803	214165	H77772	42.80	370.44	8.65	4.00	2.00	10	189.11	Placenta	Lung	LID not found
4805	138592	R83342	60.99	369.12	6.36	3.00	0.00	9	359.62	Placenta	LID not found	Other
4807	283360	N82040	9.97	93.96	10.90	0.00	1.00	7	510.43	Forebrain	Lung	Uterus
4808	140057	R65963	2.86	18.25	6.80	2.00	0.00	2	304.52	Ear	Tonsil	Blood
4813	298600	N74682	2.54	223.42	87.98	4.00	4.00	2	625.64	Placenta	LID not found	Other
4816	139331	R63782	19.71	205.98	10.45	4.00	0.00	14	67.03	Kidney	Germ Cell	Pool
4820	136289	R33780	38.27	284.81	7.44	4.00	0.00	2	625.64	Placenta	LID not found	Other
4821	122692	R00332	6.77	47.00	6.94	2.00	0.00	14	67.03	Kidney	Germ Cell	Pool

Table 2A

4824	141286	R64408	45.31	1092.18	24.11	4.00	5.00	1	642.27	Placenta	ForeSkin	Testis
4835	295492	W23522	258.83	1641.13	6.34	1.00	0.00	19	216.53	CNS	Uterus	Eye
4839	127354	R04359	12.19	102.76	8.43	2.00	2.00	6	115.59	Placenta	Testis	LID not found
4840	141366	R64449	16.78	217.56	12.86	5.00	3.00	6	381.95	Placenta	ForeSkin	Eye
4854	121521	R77784	63.38	451.13	7.12	3.00	0.00	6	44.4	ForeSkin	Spleen	Blood
4856	139650	R63980	2.85	20.17	7.08	4.00	0.00	6	626.75	Adrenal gland	Ovary	Prostate
4858	241068	H01404	57.15	285.74	5.17	0.00	1.00	5	500.33	Lymph	Pool	LID not found
4859	295594	W02403	193.89	1448.47	7.47	2.00	0.00	7	337.50	Pool	LID not found	Other
4867	121543	T97809	4.93	38.42	7.39	1.00	1.00	20	188.13	CNS	Prostate	Colon
4874	357091	W93510	26.86	162.71	5.48	1.00	0.00	10	597.76	Pool	LID not found	Other
4881	136303	R34013	50.90	298.31	5.06	2.00	0.00	13	87.45	Bone marrow	Blood	Uterus
4882	66474	R16009	9.06	87.27	9.63	5.00	0.00	8	327.75	Pool	LID not found	Other
4884	136632	R34857	23.51	119.77	5.09	1.00	0.00	20	200.06	Pool	LID not found	Other
4886	136465	R49470	40.64	318.04	7.78	4.00	0.00	14	112.05	Pool	LID not found	Other
4891	121934	T87670	36.98	276.50	7.48	5.00	1.00	14	98.28	Pool	LID not found	Other
4892	247002	N57848	102.34	727.63	7.11	3.00	0.00	14	627.18	Pool	LID not found	Other
4901	294018	N64033	4.32	21.75	5.03	1.00	0.00	2	208.5	Pool	LID not found	Other
4904	67007	T89709	2.74	15.22	5.55	2.00	0.00	7	555.55	Pool	LID not found	Other
4905	233932	N59542	24.01	275.72	11.49	4.00	5.00	1	593.19	Placenta	Colon	LID not found
4908	204701	N54840	2.67	15.13	6.68	1.00	0.00	11	373.42	Testis	Adrenal gland	Germ Cell
4909	207421	N58666	26.50	162.32	6.12	1.00	0.00	5	473.57	Pool	LID not found	Other
4915	136712	R33008	47.50	298.08	6.28	3.00	2.00	12	319.85	Pool	LID not found	Other
4917	248481	R28280	5.75	31.21	5.43	1.00	1.00	1	629.23	Pool	LID not found	Other
4918	275950	R03394	9.51	48.64	5.11	1.00	0.00	14	251	Adrenal gland	Germ Cell	Gall bladder
4919	202921	H54384	2.89	16.19	6.09	2.00	0.00	3	627.2	Uterus	CNS	Testis
4921	200873	R08174	49.81	703.25	14.13	2.00	3.00	11	66.74	Pool	LID not found	Other
4922	296805	N70298	4.42	62.30	14.06	4.00	0.00	10	92.14	Pool	LID not found	Other
4923	135247	R31621	37.97	211.71	5.97	0.00	1.00	6	39.19	Small intestine	Head and neck	
4924	415099	W08592	4.56	25.75	5.65	1.00	0.00	5	281.27	Cervix	Ear	Unabical cord
4927	240480	H90746	70.90	676.54	9.54	4.00	0.00	6	458.89	Stomach	Lymph	Prostate
4928	233652	H65942	3.20	50.39	15.74	3.00	0.00	10	538.27	Heart	Brain	Pool
4930	296801	W04272	6.78	53.76	7.95	2.00	0.00	10	538.27	Heart	Brain	Pool
4931	136800	R63986	51.21	285.30	5.57	2.00	0.00	10	538.27	Heart	Brain	Pool
4933	204251	H59168	3.12	16.19	6.20	2.00	0.00	10	538.27	Heart	Brain	Pool
4935	234664	H77737	1.89	10.08	5.07	1.00	0.00	10	538.27	Heart	Brain	Pool
4937	200938	R98947	3.35	37.75	11.26	4.00	0.00	10	538.27	Heart	Brain	Pool
4938	295483	W05026	124.53	395.30	31.71	12.00	2.00	10	538.27	Heart	Brain	Pool
4939	127400	R08563	2.94	29.70	10.11	2.00	0.00	10	538.27	Heart	Brain	Pool
4943	295604	N68845	17.20	142.30	8.27	4.00	0.00	10	538.27	Heart	Brain	Pool
4945	200840	R68848	2.46	16.72	6.80	1.00	0.00	10	538.27	Heart	Brain	Pool
4947	141684	R69645	2.25	15.27	6.78	2.00	0.00	10	538.27	Heart	Brain	Pool
4948	249687	H55454	0.85	6.99	10.76	0.00	1.00	10	538.27	Heart	Brain	Pool
4951	235873	N73510	7.57	63.84	8.43	3.00	2.00	10	538.27	Heart	Brain	Pool
4954	204445	W01511	19.57	135.95	6.95	1.00	1.00	10	538.27	Heart	Brain	Pool
4961	200937	R99004	22.51	434.35	19.30	6.00	5.00	10	538.27	Heart	Brain	Pool
4964	416587	W08451	4.90	56.28	10.25	1.00	0.00	10	538.27	Heart	Brain	Pool
4966	486279	AA044205	7.99	316.80	39.87	12.00	1.00	10	538.27	Heart	Brain	Pool
4967	233627	H65984	128.22	937.80	7.31	2.00	0.00	10	538.27	Heart	Brain	Pool
4968	247482	N54181	13.46	99.16	7.37	2.00	4.00	10	538.27	Heart	Brain	Pool
4975	240581	H90859	34.10	259.48	7.81	3.00	0.00	10	538.27	Heart	Brain	Pool
4976	793871	AA460152	79.78	500.54	6.27	0.00	1.00	10	538.27	Heart	Brain	Pool
4977	201393	R98827	41.46	515.80	12.44	5.00	5.00	10	538.27	Heart	Brain	Pool
4978	284842	N74473	189.43	938.64	5.34	2.00	0.00	10	538.27	Heart	Brain	Pool
4980	341834	W60647	196.87	1153.92	5.86	0.00	1.00	10	538.27	Heart	Brain	Pool

Table 2A

4881	207283	H53670	4.45	34.40	7.74	1.00	0.00	15	50.93	Pool	LID not found	Other
4884	264478	H52350	2.32	11.77	5.07	1.00	0.00	3	160.11	CNS	Brain	LID not found
4885	300351	H56033	68.70	538.39	7.72	0.00	0.00	2	194	Heart	LID not found	Other
4888	360029	AA063574	2.32	21.23	6.15	0.00	2.00	7	475.57	Kidney	Pancreas	Testis
4904	813256	AA455911	3.27	79.35	24.25	5.00	1.00	16	406.29	Small intestine	Esophagus	
4896	251018	H97778	25.48	585.14	23.90	8.00	1.00	3	463.34	Synovial mem	Germ Cell	
5002	44255	H06113	41.35	265.53	6.45	2.00	0.00	17	404.41	Synovial mem	Blood	Adrenal gland
5007	741067	AA476436	145.78	2893.05	19.85	4.00	1.00	1	27	Eye	Ovary	Spleen
5011	345988	V78378	3.30	75.85	22.75	2.00	0.00	12	246.83	Breast	Adipose	Stomach
5015	160838	H24688	7.91	95.86	12.12	4.00	0.00	1	671.23	Breast	Muscle	Muscle
5016	811162	AA486471	30.70	195.58	6.37	2.00	0.00	19	35.88	Eye	Lymph	Spleen
5020	341246	W58656	20.53	107.67	5.25	1.00	0.00	5	153.89	Eye	Pool	Stomach
5023	293375	H64882	4.91	73.61	14.95	7.00	0.00	4	24.07	Larynx	CNS	Germ Cell
5024	752631	AA417654	3.48	63.27	18.20	2.00	0.00	16	193.03	Ear	Ear	Skin
5031	296529	W01011	23.25	234.52	10.85	1.00	0.00	10	526.52	Cervix	Heart	Whole embryo
5032	809464	AA456180	4.21	90.82	21.59	4.00	0.00	5	504.31	Placenta	Head and nec	Colon
5048	121722	T98152	13.81	330.56	23.84	6.00	0.00	20	294.9	Larynx	Spleen	
5051	769921	AA430504	7.99	155.62	19.47	8.00	1.00	9	301.16	Marrow	Whole embryo	Pool
5070	923590	AA497051	7.10	116.02	18.20	9.00	0.00	22	133.9	Epididymis	Ignore	Thyroid
5080	813757	AA453816	5.57	90.47	18.24	8.00	0.00	14	151.92	Podod	Spleen	Heart
5084	210317	H65528	8.09	44.17	5.46	0.00	1.00	8	417.73	Forebrain	Heart	
5089	978722	AA395572	2.62	501.01	114.81	9.00	0.00	13	141.14	Parathyroid	Synovial mem	Cervix
5090	766672	AA451891	3.12	31.08	9.85	2.00	0.00	6	104.03	Lymph node	CNS	Parathyroid
5093	67654	T48539	33.32	238.84	7.10	1.00	0.00	2	567.39	Omentum	Parathyroid	Cervix
5094	814546	AA480859	3.62	20.52	5.66	2.00	0.00	X	85.4	Uterus	Parathyroid	Bone
5097	359781	AA011320	6.83	38.09	5.50	1.00	0.00	5	350.47	Cervix	Muscle	Tonsil
5108	233365	H79888	131.96	952.94	7.22	1.00	0.00	7	484.74	Placenta	Tonsil	Ovary
5111	803500	T64625	273.12	3218.30	11.76	5.00	0.00	9	392.05	Tonsil	Muscle	Pool
5118	768091	AA453105	34.44	260.94	7.58	3.00	0.00	7	484.74	Placenta	Muscle	Pool
5124	201986	R89423	18.58	97.87	5.27	1.00	0.00	9	392.05	Tonsil	Muscle	Pool
5125	503097	AA151485	58.37	309.18	5.30	1.00	0.00	19	213.81	Smooth muscle	Blood	Adipose
5130	843133	AA486524	151.58	1317.66	8.70	2.00	0.00	2	304.52	Ear	Tonsil	Blood
5131	812256	AA455062	21.36	220.81	10.34	2.00	0.00	2	222.73	Gall bladder	Tonsil	Forebrain
5136	246789	N53177	6.09	51.88	8.54	4.00	0.00	3	340.31	Eye	Forebrain	Pool
5139	824393	AA469714	6.29	35.89	5.71	1.00	0.00	20	264.27	Pool	LID not found	Other
5147	824922	AA469017	1.07	14.57	13.67	1.00	0.00	10	441.32	Breast	LID not found	Other
5164	246849	N59542	9.19	55.80	6.07	1.00	0.00	3	385.51	Placenta	Pooled	Heart
5176	246884	N54296	25.33	136.01	5.37	0.00	1.00	8	540.74	Breast	LID not found	Other
5184	265484	R11309	12.17	95.74	7.87	0.00	1.00	7	607.47	Pool	LID not found	Other
5187	120501	R11529	3.41	17.25	3.06	0.00	0.00	9	123.91	Esophagus	Larynx	Blood
5188	184390	H43657	5.17	33.01	6.38	1.00	0.00	2	218.99	Pool	LID not found	Other
5190	111844	T84669	2.16	12.07	5.58	1.00	0.00	4	450.11	Uterus	Placenta	Parathyroid
5191	131316	R23055	7.59	47.43	6.25	0.00	2.00	2	218.99	Pool	LID not found	Other
5193	131881	R82780	23.90	197.08	8.24	1.00	0.00	4	450.11	Uterus	Placenta	Parathyroid
5196	182985	H27580	17.53	126.29	7.20	3.00	0.00	2	218.99	Pool	LID not found	Other
5198	295472	W00973	4.01	21.84	5.45	2.00	0.00	4	450.11	Uterus	Placenta	Parathyroid
5200	189327	R95916	101.49	665.32	6.57	2.00	0.00	2	218.99	Pool	LID not found	Other
5202	109109	T60716	2.78	20.50	7.37	1.00	0.00	4	450.11	Uterus	Placenta	Parathyroid
5205	196005	R91604	8.21	41.77	6.73	1.00	0.00	2	218.99	Pool	LID not found	Other
5207	131388	R23097	3.30	19.58	5.93	2.00	0.00	4	450.11	Uterus	Placenta	Parathyroid
5208	210622	H64244	9.85	198.27	20.12	5.00	0.00	2	218.99	Pool	LID not found	Other
5213	134948	R31831	7.01	54.85	7.82	5.00	0.00	4	450.11	Uterus	Placenta	Parathyroid
5214	111765	T84965	81.86	288.27	5.55	1.00	0.00	2	218.99	Pool	LID not found	Other
5216	196522	R91557	13.24	73.07	5.52	1.00	0.00	2	218.99	Pool	LID not found	Other
5220	209167	H63688	28.20	667.08	23.66	5.00	3.00	2	218.99	Pool	LID not found	Other

Table 2A

5222	246143	N52403	187.72	1040.36	5.54	2.00	0.00	19	250.6	Plethora	Aorta	Uterus
5227	345670	W76803	10.55	413.19	39.13	1.00	0.00	18	56.29	Adipose	Pooled	Heart
5228	202740	H53893	33.65	486.27	14.45	6.00	3.00	12	484.53	Kidney	Breast	Colon
5230	121681	T97616	10.69	73.24	6.85	3.00	3.00			LID not found	LID not found	Other
5232	203772	H56088	53.03	455.36	6.39	4.00	0.00	17	322.57	Pool	LID not found	Other
5233	210073	H05312	6.92	2019.02	201.60	1.00	3.00			Pool	LID not found	Other
5244	201652	R97050	4.34	29.88	6.90	1.00	0.00	13	131.78	Pool	LID not found	Other
5248	294888	N99519	3.75	18.88	5.03	0.00	2.00			Pool	LID not found	Other
5252	191508	H78848	28.55	308.99	10.62	4.00	0.00			Pooled	Plethora	Brain
5255	132159	R28094	9.71	68.16	7.02	5.00	1.00	12	457.31	Pancreas	CNS	Testis
5262	244154	N73699	70.65	581.16	8.18	1.00	0.00	13	85.4	Testis	Pool	LID not found
5284	195314	R92032	2.34	12.02	5.15	1.00	0.00			Plethora	Testis	LID not found
5285	136210	R33841	5.33	35.89	7.01	2.00	0.00	7	588.48	Aorta	CNS	Pool
5286	293692	H80558	16.28	101.49	5.55	1.00	1.00			Pool	LID not found	Other
5287	129567	R14894	30.48	283.75	9.32	5.00	0.00			Pool	LID not found	Other
5272	195820	R92285	48.14	752.28	16.30	6.00	5.00			Pool	Testis	Plethora
5273	130371	R21785	18.07	133.41	6.99	0.00	1.00			Cervix	LID not found	Other
5275	129922	R19163	65.35	775.63	9.09	4.00	2.00	5	626.75	Ear	Small intestine	Eye
5277	368369	AA026807	228.73	1357.48	5.93	3.00	0.00	11	124.08	Pool	LID not found	Other
5280	195821	R92292	54.59	680.52	12.47	5.00	5.00	5	14.04	Cervix	Pooled	Pancreas
5288	270838	AA427732	7.49	40.16	5.36	1.00	0.00	6	164.21	Spleen	Pool	LID not found
5294	235055	H73808	14.90	92.63	6.22	0.00	1.00	10	342.2	Brain	Ovary	Lung
5296	811010	AA485365	34.61	212.20	6.15	1.00	0.00	12	55.14	Ear	Gall bladder	Breast
5298	133236	R26929	16.89	105.73	6.26	2.00	0.00			Muscle	Heart	Pool
5305	233446	H77714	26.02	571.36	21.96	4.00	3.00	8	540.74	Neural	Pancreas	Ovary
5308	376059	AA040269	4.09	23.40	5.72	1.00	0.00			Tonsil	CNS	Muscle
5309	113071	H72032	6.52	81.69	9.34	3.00	0.00	7	640.87	Plethora	Heart	Pool
5310	257011	N26802	12.75	215.41	16.69	5.00	4.00	2	545.08	CNS	Brain	LID not found
5317	280386	N49375	3.17	18.81	5.94	0.00	1.00					
5319	220077	H82532	10.68	96.21	5.26	1.00	0.00	7	140.47	Mouth	Ear	Bone
5327	765371	AA453273	31.48	185.46	6.69	1.00	0.00	13	107	Aorta	Brain	Whole embryo
5328	341854	V55342	2.58	39.90	15.47	1.00	0.00	17	329.98	Brain	Pool	LID not found
5329	233719	H75046	1.58	95.64	60.38	1.00	0.00			Pool	LID not found	Other
5336	111070	T63394	28.74	184.18	6.41	1.00	2.00	7	413.5	Pool	LID not found	Other
5341	243848	N48988	47.82	249.31	5.20	1.00	0.00	9	53.56	Neural	Kidney	Heart
5342	140636	R68945	6.53	50.96	5.97	1.00	0.00	X	86.88	Plethora	Ear	Heart
5344	428773	AA04664	3.90	75.90	19.43	4.00	0.00	4	403.14	Pool	Whole embryo	LID not found
5345	294150	N98803	47.71	280.39	5.85	1.00	0.00	10	460.31	Parathyroid	Uterus	Pool
5349	243656	N48895	166.09	1077.89	5.79	2.00	2.00			Blood	Fore skin	Plethora
5350	130836	R22252	11.90	81.49	5.17	0.00	1.00	20	70.67	Pool	LID not found	Other
5353	206749	N70559	20.02	117.13	5.85	2.00	0.00	9	323.12	Tonsil	Fore skin	CNS
5354	115223	T88603	37.37	216.61	5.60	1.00	0.00	13	155.38	Whole embryo	Spleen	Kidney
5360	502082	AA128825	4.29	25.03	6.83	0.00	1.00			Ovary	Blood	Heart
5366	125695	R07594	31.68	278.82	8.80	4.00	0.00	2	300.43	Fore skin	Colon	LID not found
5371	811128	AA485583	3.12	42.07	13.50	0.00	2.00	13	84.78	CNS	Pool	Heart
5372	316852	AA045257	12.80	68.37	5.34	0.00	1.00	9	14.64	Umbilical cord	CNS	Whole embryo
5373	195487	AA464605	9.33	55.98	6.00	1.00	0.00	17	338.92	Pooled	Plethora	Blood
5383	812875	H02340	1.26	36.02	29.13	5.00	0.00	2	318.41	Blood	Colon	Kidney
5390	66882	T67549	6.86	36.04	6.15	4.00	0.00	7	115.72	Blood	Colon	Synovial membrane
5392	897487	AA497085	3.43	32.94	9.61	1.00	0.00	1	562.84	Bone marrow	Neural	Pancreas
5395	813873	AA458831	117.19	872.25	5.74	1.00	0.00	1	557.85	Smooth muscle	CNS	
5405	813841	AA453728	14.47	193.57	10.96	1.00	0.00					
			41.63	311.01	7.45	0.00	1.00					

Table 2A

5408	212849	H10473	2.40	20.42	8.50	2.00	0.00	12	Liver	Pool	Colon
5418	810873	AA458197	31.54	381.89	12.11	4.00	0.00	10	37.52 Esophagus	Ovary	Thyroid
5428	293104	N91890	29.90	414.75	13.87	1.00	0.00	10	87.85 Neural	Gall bladder	Thyroid
5438	204897	H57189	5.40	32.78	6.07	0.00	1.00	16	482.18 Lymph	Kidney	Pool
5440	211780	H71888	121.85	739.00	5.78	1.00	0.00	5	388.4 Head and nec	Umbilical cord	Thyroid
5443	31842	R41839	6.07	52.86	7.67	3.00	0.00	17	345.1 Adipose	Skin	Umbilical cord
5446	51916	H22563	5.17	39.43	7.63	1.00	1.00	20	57.43 Thyroid	Fore skin	Blood
5454	742082	AA405789	2.11	29.83	14.11	3.00	1.00	20	333.71 Adipose	Liver	Kidney
5455	245188	N76581	5.84	57.99	10.21	2.00	0.00	17	308.46 Skin	Adipose	Stomach
5456	150623	H02158	15.68	137.58	8.78	5.00	0.00	11	237.93 Trachea	Parathyroid	Thyroid
5458	153008	R49898	2.63	16.41	6.23	1.00	0.00	21	248.73 Adrenal gland	Tonsil	Brain
5460	27787	R40400	12.29	87.57	7.12	1.00	0.00	3	7.15 Adipose	CNS	Brain
5467	343443	W67323	51.37	280.95	5.66	1.00	1.00	8	118.53 IgG	Germ Cell	Breast
5475	785282	AA453338	2.10	11.87	5.57	1.00	0.00	6	117.94 Pooled	Breast	Whole embryo
5478	49260	H16573	0.87	4.60	5.27	1.00	0.00	6	180.71 Brain	Eye	Testis
5480	788185	AA453410	9.88	87.53	6.99	0.00	1.00	8	100.33 Thyroid	Umbilical cord	Spleen
5485	51448	H21041	10.89	74.74	6.90	2.00	0.00	1	697.15 Smooth musc	CNS	Parathyroid
5489	51885	H23187	0.54	3.11	5.77	0.00	1.00	8	419.78 Bone	Kidney	CNS
5494	898052	AA458778	37.94	315.98	8.33	0.00	1.00	8	280.44 Larynx	Lymph	Colon
5500	843049	AA485593	6.11	59.83	9.79	1.00	0.00	1	727.92 Omentum	Carvix	Blood
5509	398511	AA028609	37.73	292.78	7.76	2.00	0.00	1	727.92 Omentum	Muscle	Umbilical cord vein
5510	700502	AA283693	4.06	111.12	27.35	1.00	0.00	1	Tonsil	Breast	Germ Cell
5516	795427	AA461508	5.22	57.32	10.98	1.00	0.00	12	Blood	Brain	Muscle
5524	704459	AA278883	3.39	50.52	14.88	1.00	0.00	12	59.88	Tonsil	CNS
5533	48799	H14841	105.24	814.30	5.94	2.00	0.00	17	46.89 Eye	Brain	CNS
5538	782513	AA448478	89.15	815.43	11.79	5.00	0.00	16	471.03 Ovary	Stomach	Ear
5543	232973	H75547	228.00	1373.78	5.98	3.00	0.00	18	250.8 Small intestine	Bone marrow	Stomach
5548	504128	AA132000	4.64	48.78	10.51	4.00	0.00	1	340.59 Thymus	Lymph	Blood
5552	208413	H82182	2.75	77.78	28.27	7.00	1.00	1	Kidney	Liver	Prostate
5555	499261	AA028112	1.80	10.03	5.56	1.00	0.00	20	Pancreas	Heart	Uterus
5560	814328	AA459588	4.49	58.09	12.93	7.00	0.00	18	353.84 Thymus	Ovary	Blood
5561	48182	H09614	28.72	182.85	6.37	1.00	1.00	18	347.86	Fore skin	Breast
5562	784319	AA447098	66.78	302.27	6.32	1.00	0.00	18	270.03 Ear	Heart	Breast
5563	627939	AA155559	58.12	325.27	5.60	0.00	2.00	11	73.8 Muscle	Heart	Lymph
5564	305013	N91385	3.75	27.58	7.38	1.00	0.00	11	221.18 Blood	Parathyroid	Stomach
5567	825583	AA504517	7.99	40.21	5.03	1.00	0.00	20	185.03 Head and nec	Thymus	Pancreas
5568	785293	AA476843	22.82	120.51	5.28	0.00	1.00	11	239.59 Pooled	Colon	Whole embryo
5570	248703	N59716	20.00	114.95	6.75	1.00	0.00	X	87.34 Thyroid	Aorta	Whole embryo
5578	121881	T97889	6.70	49.29	7.35	0.00	1.00	1	142.59	LID not found	Other
5583	124091	R02718	2.45	13.82	5.65	1.00	0.00	10	421.71 Pool	Pool	LID not found
5590	201264	R99311	5.55	61.58	11.70	6.00	0.00	1	740.99 Liver	Whole embryo	Prostate
5596	136775	R35253	11.61	60.78	5.23	1.00	0.00	2	601.45 Placenta	Eye	CNS
5599	124079	R02820	13.97	72.53	5.35	0.00	1.00	4	184.61 Thyroid	Tonsil	Ovary
5605	108422	T77847	13.84	181.17	11.44	3.00	0.00	2	19.44 CNS	Parathyroid	Fore skin
5610	284040	N84897	25.72	233.68	7.86	1.00	3.00	6	384.33 Pancreas	Muscle	Tonsil
5615	128785	R10015	8.06	68.55	8.23	2.00	0.00	11	260.03 Ear	Small intestine	Thymus
5617	245426	N77205	81.49	492.14	6.04	1.00	0.00	5	391.73 Pool	LID not found	Other
5619	121358	T98073	18.48	215.85	11.68	8.00	2.00	5	629.01 CNS	Brain	LID not found
5629	227111	T74714	6.74	37.14	5.51	1.00	0.00	8	629.01 CNS	Brain	Whole embryo
5630	243817	N45244	38.58	245.28	6.35	4.00	0.00	6	361.74 Umbilical cord	Prostate	Whole embryo
5632	140334	R68994	7.95	63.74	6.78	3.00	3.00	10	510.06 Placenta	LID not found	Other
5633	122178	T98615	11.93	122.49	10.26	6.00	0.00	11	261.25 Placenta	Placenta	Kidney
5644	136801	R36181	85.42	729.64	8.54	3.00	0.00	11	261.25 Placenta	Breast	Heart
5646	282749	N80491	14.30	72.80	5.10	1.00	0.00	1	371.25 Blood	Germ Cell	Pooled
5647	128822	R05637	2.25	17.82	7.93	2.00	0.00	1	Ovary	Brain	Pool

Table 2A

5653	121776	T80088	3.24	17.67	5.45	1.00	0.00	3	46.9	Blood	Placenta	Prostate
5657	127636	R03001	11.75	77.84	6.62	1.00	1.00	19	284.08	Pool	UD not found	Other
5660	138636	R68534	8.36	62.36	7.46	1.00	1.00	15	243	Pool	LID not found	Other
5665	200545	H08445	7.80	42.69	5.62	1.00	0.00	6	364.54	Testis	Aorta	Whole embryo
5673	200804	H49487	17.21	131.41	7.84	3.00	0.00	11	236.72	Pool	LID not found	Other
5674	205044	N71666	10.93	98.74	6.04	5.00	3.00	2	544.88	Pool	LID not found	Other
5677	207881	H50317	49.61	685.43	13.82	4.00	2.00	10	345.66	Eye	CNS	Placenta
5678	137139	R36008	7.83	50.67	6.47	2.00	1.00	20	338.98	Pool	LID not found	Other
5682	295106	W01645	3.52	44.23	12.55	8.00	0.00	15	220.59	Pool	Gall bladder	Fore skin
5685	207068	H01491	16.17	132.58	6.74	6.00	0.00	2	506.5	Breast	LID not found	Other
5686	138444	R08272	3.68	61.83	16.80	1.00	0.00	11	227.6	Parathyroid	Ovary	Breast
5690	295690	W02401	44.36	292.25	6.36	2.00	1.00	18	35.98	Pooled	Placenta	Pool
5693	207952	H60523	19.24	145.45	7.56	2.00	0.00	1	15.07	Pool	LID not found	Other
5696	271962	N35301	5.53	91.00	19.46	5.00	2.00	11	675.59	Liver	Spleen	Blood
5698	296094	W02591	10.11	180.28	17.83	5.00	5.00	4	167.19	Liver	Spleen	Blood
5703	159725	H23963	101.23	658.99	6.49	2.00	0.00	19	32.22	Synovial mem	Adrenal gland	Placenta
5709	208984	H60688	74.43	471.73	8.34	1.00	0.00	5	402.9	Germ Cell	Uterus	
5713	201314	R08882	32.16	202.66	6.30	2.00	0.00	3	453.05	Placenta	UD not found	Other
5715	144680	R76580	1.92	12.53	6.52	2.00	0.00	7	64.01	Placenta	Aorta	Pool
5719	131239	R24258	3.51	25.05	7.13	2.00	0.00	18	287.41	Smooth musc	Pancreas	Skin
5720	810403	AA484202	15.02	82.07	5.46	0.00	1.00	2	68.08	Pool	LID not found	Other
5721	201317	R99690	13.71	206.53	15.03	6.00	5.00	11	204.26	Placenta	Pool	Cervix
5722	286559	W00793	73.17	507.83	6.94	1.00	0.00	11	204.26	Placenta	Pool	LID not found
5724	281475	N51521	10.48	365.12	36.70	1.00	0.00	18	287.41	Smooth musc	Pancreas	Skin
5725	210548	H66052	20.39	174.79	6.95	6.00	4.00	2	68.08	Pool	LID not found	Other
5726	109314	T80348	3.36	19.20	5.7	1.00	0.00	11	204.26	Placenta	Pool	Cervix
5728	360075	AA013240	2.11	12.37	5.88	1.00	0.00	11	204.26	Placenta	Pool	LID not found
5731	135588	R32406	5.93	32.43	5.47	1.00	0.00	18	287.41	Smooth musc	Pancreas	Skin
5733	213118	H69576	128.72	862.04	6.76	1.00	0.00	2	68.08	Pool	LID not found	Other
5737	201784	R99638	11.19	64.31	5.75	1.00	0.00	11	204.26	Placenta	Pool	Cervix
5738	298602	W01026	68.30	436.73	6.59	2.00	1.00	11	204.26	Placenta	Pool	LID not found
5739	240430	H76097	14.99	96.87	8.86	1.00	0.00	18	287.41	Smooth musc	Pancreas	Skin
5741	203940	H61684	6.56	44.83	6.80	4.00	0.00	2	68.08	Pool	LID not found	Other
5747	285916	W04152	51.22	527.18	10.29	5.00	2.00	11	204.26	Placenta	Pool	LID not found
5748	795093	AA460188	0.76	12.66	16.57	1.00	1.00	18	287.41	Smooth musc	Pancreas	Skin
5749	211351	H75990	2.98	23.28	6.81	1.00	0.00	2	68.08	Pool	LID not found	Other
5750	122787	T99674	8.06	37.21	6.14	1.00	0.00	11	204.26	Placenta	Pool	Cervix
5753	201818	H48318	2.64	15.03	8.82	1.00	4.00	11	204.26	Placenta	Pool	LID not found
5755	284592	N76193	20.72	132.39	6.39	0.00	1.00	11	204.26	Placenta	Pool	LID not found
5757	208434	H62165	20.58	162.07	7.87	2.00	2.00	11	204.26	Placenta	Pool	LID not found
5759	233645	H79007	76.18	500.08	7.22	2.00	2.00	11	204.26	Placenta	Pool	LID not found
5763	28012	R40784	25.40	139.90	5.51	1.00	0.00	X	238.33	Small intestine	Gall bladder	Parathyroid
5768	810813	AA458884	4.33	63.77	14.73	1.00	0.00	12	457.31	Pancreas	CNS	Testis
5769	303048	N91584	10.56	303.63	28.72	6.00	4.00	9	70.89	Prostate	Lung	Head and neck
5781	46356	H09936	2046.09	12624.63	6.32	1.00	0.00	2	108.91	Blood	Prostate	Muscle
5784	122274	T98783	34.32	203.01	5.91	1.00	1.00	2	108.91	Blood	Prostate	Muscle
5790	177737	H46683	6.78	39.24	5.76	1.00	0.00	2	108.91	Blood	Prostate	Muscle
5804	742101	AA405691	14.67	286.69	16.68	10.00	3.00	2	108.91	Blood	Prostate	Muscle
5812	810724	AA480815	1.15	13.72	11.95	1.00	1.00	6	116.56	Marrow	Smooth muscle	Larynx
5820	511066	AA100296	1.89	15.26	8.08	3.00	0.00	19	71.09	Whole embryo	Pool	Unilateral cord
5824	48509	H15634	13.41	105.49	7.87	3.00	0.00	1	575.3	Peripheral nar	CNS	Blood
5826	51447	H20872	7.47	119.62	16.02	6.00	0.00	11	400.33	Ear	Brain	Codon
5827	767089	AA424516	9.20	240.93	26.18	16.00	0.00					

Table 2A

6043	203514	H55968	3.76	23.26	5.19	2.00	0.00	11	288.06	Gall bladder	Fore skin	Whole embryo
6044	235741	W92463	2.20	15.80	7.19	1.00	0.00	17	406.06	Parathyroid	Ovary	Brain
6047	131824	R25114	2.48	12.87	5.18	0.00	1.00	11	425.84	Placenta	Heart	Lung
6048	280122	N49231	59.47	1326.43	22.30	6.00	5.00				Breast	Kidney
6052	282404	N49774	8.11	58.31	6.40	2.00	0.00	12	134.37	CNS		
6053	762203	AA431972	15.54	92.37	5.95	0.00	1.00					
6057	240138	H79613	2.64	16.53	5.89	3.00	0.00	18	162.07		Stomach	Pooled
6058	121811	T97590	78.78	494.97	6.28	1.00	0.00				Esophagus	Cervix
6063	307314	N95217	202.10	1072.03	5.30	2.00	0.00				Pool	LID not found
6064	241847	H93393	8.06	92.05	11.42	3.00	0.00	21	215.71	Smooth muscle	Pool	Prostate
6067	416856	W96960	2.87	15.83	5.51	0.00	1.00	15	243.11	Ignore		
6069	284341	N52254	3.17	45.78	14.43	0.00	1.00	7	94.41	Fore skin	LID not found	Whole embryo
6071	203474	H55784	140.53	977.85	6.86	1.00	0.00	2	334.55	Thymus	Breast	Breast
6075	268000	N23753	18.46	108.59	6.77	2.00	0.00	2	558.69	Ovary	LID not found	Other
6079	181988	H75846	60.64	644.48	10.63	5.00	0.00	X	276.71	Uterus	Uterus	Tonsil
6083	810203	AA464517	4.46	48.88	10.91	4.00	0.00	2		Prostate	LID not found	Other
6085	244722	N32535	35.31	321.13	9.10	4.00	0.00	6	64.16	Germ Cell	Uterus	Cervix
6086	470846	AA031770	77.49	420.72	5.43	0.00	1.00			Fore skin	Pool	LID not found
6089	241097	H80336	18.11	118.61	7.35	2.00	3.00			Paracress	Pool	LID not found
6092	742537	AA448484	4.58	44.78	9.78	3.00	0.00			Prostate	Ovary	LID not found
6095	417305	W90001	11.16	64.48	5.77	4.00	0.00	1	28.08	Lung	LID not found	Other
6097	235962	N73555	6.18	37.53	6.07	1.00	0.00	19	271.02	Pool	Bone	Ear
6099	416511	W98466	6.53	91.61	18.57	3.00	0.00			Adipose	Kidney	Breast
6101	245082	N72384	8.58	33.87	5.15	0.00	1.00	9	377.24	Thyroid	Stomach	Ovary
6103	771023	AA427878	4.65	39.05	6.39	7.00	4.00			Pool	Ovary	Germ Cell
6110	233289	H77506	88.69	843.44	6.55	2.00	0.00			Pool	LID not found	Other
6112	241507	H80724	74.60	423.77	6.68	2.00	0.00	15	243.19	Cervix	Pool	LID not found
6115	488202	AA046424	4.16	30.64	7.38	1.00	0.00	9	252.77	Ear	Ear	Skin
6116	770865	AA434390	12.25	218.85	17.86	1.00	1.00			Pooled	Thyroid	Tonsil
6119	810609	AA464739	120.65	838.42	6.93	1.00	0.00			Pool	LID not found	Other
6122	129618	R16656	10.16	87.75	6.67	3.00	0.00			Placenta	Ovary	Germ Cell
6124	771058	AA427521	4.82	28.32	6.06	1.00	0.00			Pool	LID not found	Other
6125	245478	N73227	27.56	241.29	8.97	3.00	0.00			Cervix	Pool	LID not found
6127	195370	R98581	5.39	43.67	6.84	6.00	0.00	15		Pool	LID not found	Other
6129	230509	H81048	151.03	1118.42	7.41	2.00	1.00	9		Ear	Ear	Skin
6130	233071	H75932	5.98	37.27	6.26	1.00	0.00			Pool	Thyroid	Tonsil
6131	212438	H89528	58.01	551.59	8.57	5.00	0.00			Pool	LID not found	Other
6133	246780	N53167	1.87	14.96	8.02	1.00	0.00	14	260.32	Fore skin	Pool	Brain
6136	418299	W90749	3.02	36.73	12.17	1.00	0.00	12	53.22	Pool	LID not found	Other
6137	244201	N52978	2.38	42.87	18.17	2.00	0.00	14	260.52	Placenta	LID not found	Other
6138	134312	R31218	3.40	33.60	9.87	1.00	0.00	1	150.31		Testis	Lung
6140	86858	T67223	7.54	55.44	7.36	2.00	5.00			Placenta	Eye	Placenta
6143	132217	R26396	5.48	43.00	7.87	0.00	2.00			Fore skin	Fore skin	LID not found
6144	140267	R87803	151.34	1382.44	9.00	2.00	3.00	9	357.93	Nose	Parathyroid	Pooled
6148	266181	N21592	11.39	90.12	7.98	7.00	0.00	12	415.54	Fore skin	Heart	LID not found
6156	322223	W938022	3.13	60.77	19.44	16.00	0.00			Fore skin	LID not found	Other
6160	376843	AA046112	8.40	50.79	8.05	0.00	1.00			CNS	Heart	Brain
6163	272648	N35892	7.41	70.52	9.52	3.00	0.00	12	242.02	Pool	LID not found	Other
6171	133192	R28456	2.56	15.47	6.03	1.00	0.00	11	99.65	Placenta	Pool	Kidney
6184	357265	W93662	3.75	57.93	15.45	2.00	0.00	19	34.68	Marrow	Breast	Ovary
6203	357396	T97850	2.89	14.62	5.03	1.00	1.00	11	277.15	Blood	Fore skin	Colon
6211	782333	AA431721	2.98	45.29	15.22	2.00	0.00	6	503.11	Placenta	Parathyroid	Prostate
6215	281712	N67839	8.53	48.58	5.73	2.00	0.00					
6219	428431	AA004415	24.67	153.48	6.17	2.00	0.00					
			1.48	14.51	10.00	2.00	0.00					

Table 2A

6220	213850	H72386	20.72	218.92	10.56	0.00	1.00	11	131.77	Whole embryo	Ovary	Kidney
6228	112456	T80971	3.27	17.64	5.48	1.00	0.00	10	400.44	Spleen	Tonsil	Forebrain
6240	301043	N81017	2.89	24.88	8.31	5.00	0.00	2	743.9	Heart	LID not found	Other
6244	239866	H68542	23.67	137.65	5.82	1.00	0.00	19	68.86	Bone marrow	Head and nec	Placenta
6247	327058	AA234287	2.08	17.03	5.86	1.00	0.00	10	549.98	Testis	LID not found	Other
6248	287751	N03908	44.42	830.00	18.61	3.00	0.00	1	32.1	Pool	LID not found	Other
6251	809703	AA454710	4.39	33.40	7.61	2.00	0.00	18	115.51	Heart	LID not found	Other
6254	429764	AA009677	2.47	22.30	9.01	4.00	0.00	8	417.75	Ear	Heart	Brain
6259	154769	R55630	6.94	49.19	7.09	1.00	0.00	12	84.71	Testis	Heart	Brain
6260	203114	H54419	104.48	1043.38	9.89	4.00	0.00	1	165.69	Heart	Testis	LID not found
6263	327239	AA234307	11.58	64.71	5.59	1.00	0.00	1	165.69	Heart	Testis	LID not found
6265	366590	AA026666	27.83	139.08	5.03	1.00	0.00	1	165.69	Heart	Testis	LID not found
6268	263554	H56028	213.57	2457.62	11.31	4.00	0.00	1	165.69	Heart	Testis	LID not found
6275	234131	H70608	252.22	1518.19	6.02	1.00	0.00	1	165.69	Heart	Testis	LID not found
6277	327179	W02753	4.39	40.09	9.14	1.00	0.00	1	165.69	Heart	Testis	LID not found
6285	327195	AA284249	15.86	91.15	5.75	1.00	0.00	1	165.69	Heart	Testis	LID not found
6282	245342	H33564	25.65	140.20	5.47	1.00	0.00	1	165.69	Heart	Testis	LID not found
6289	320495	W16659	3.54	31.61	8.93	1.00	0.00	1	165.69	Heart	Testis	LID not found
6300	209339	H64150	167.99	1297.51	8.90	2.00	0.00	1	165.69	Heart	Testis	LID not found
6303	321470	W02303	11.38	57.93	5.10	1.00	0.00	1	165.69	Heart	Testis	LID not found
6304	590144	AA156030	13.06	70.29	5.36	1.00	0.00	1	165.69	Heart	Testis	LID not found
6305	384563	AA022948	4.71	164.27	34.90	7.00	0.00	1	165.69	Heart	Testis	LID not found
6306	505000	AA151285	3.90	28.85	7.65	3.00	0.00	1	165.69	Heart	Testis	LID not found
6316	479484	AA011347	11.40	61.38	5.39	1.00	0.00	1	165.69	Heart	Testis	LID not found
6318	343595	W68170	4.94	44.89	9.11	1.00	0.00	1	165.69	Heart	Testis	LID not found
6320	232274	H68518	8.08	56.87	7.05	1.00	0.00	1	165.69	Heart	Testis	LID not found
6321	501868	AA128005	10.13	114.62	5.99	1.00	0.00	1	165.69	Heart	Testis	LID not found
6324	207638	H59063	35.97	228.38	6.35	2.00	0.00	1	165.69	Heart	Testis	LID not found
6326	34E360	W74254	3.42	20.51	5.99	1.00	0.00	1	165.69	Heart	Testis	LID not found
6328	488145	AA056709	4.34	32.31	7.45	3.00	0.00	1	165.69	Heart	Testis	LID not found
6331	502860	AA128362	21.80	150.03	6.88	1.00	0.00	1	165.69	Heart	Testis	LID not found
6341	744980	AA625915	2.38	17.53	7.38	1.00	0.00	1	165.69	Heart	Testis	LID not found
6346	530545	AA112979	8.24	41.48	5.04	1.00	0.00	1	165.69	Heart	Testis	LID not found
6351	509641	AA058323	478.17	3249.59	6.80	2.00	0.00	1	165.69	Heart	Testis	LID not found
6352	85384	T71865	52.99	317.62	5.99	1.00	0.00	1	165.69	Heart	Testis	LID not found
6353	433858	AA701545	6.04	34.49	5.71	2.00	0.00	1	165.69	Heart	Testis	LID not found
6354	1031789	AA609655	15.65	93.01	5.67	1.00	0.00	1	165.69	Heart	Testis	LID not found
6355	455121	AA676804	16.59	118.35	7.01	0.00	1.00	1	165.69	Heart	Testis	LID not found
6356	236034	H81243	21.79	621.89	28.53	18.00	0.00	1	165.69	Heart	Testis	LID not found
6360	79000	T81938	10.87	193.22	17.61	4.00	0.00	1	165.69	Heart	Testis	LID not found
6366	744800	AA544448	7.62	75.32	8.65	5.00	0.00	1	165.69	Heart	Testis	LID not found
6377	877762	AA626787	8.34	47.69	5.72	1.00	0.00	1	165.69	Heart	Testis	LID not found
6385	725309	AA291558	2.25	12.42	5.52	2.00	0.00	1	165.69	Heart	Testis	LID not found
6394	32597	R43605	2.84	40.75	13.88	1.00	0.00	1	165.69	Heart	Testis	LID not found
6397	743660	AA634464	9.24	56.62	6.35	1.00	0.00	1	165.69	Heart	Testis	LID not found
6405	740742	AA478631	23.06	118.67	5.15	0.00	1.00	1	165.69	Heart	Testis	LID not found
6407	731426	AA412064	5.23	34.41	5.52	1.00	0.00	1	165.69	Heart	Testis	LID not found
6408	78726	T62352	5.67	131.55	19.71	8.00	0.00	1	165.69	Heart	Testis	LID not found
6410	742763	AA400186	10.89	96.95	5.32	1.00	0.00	1	165.69	Heart	Testis	LID not found
6412	87330	T48238	15.28	76.34	5.12	1.00	0.00	1	165.69	Heart	Testis	LID not found
6416	41647	R52764	3.33	35.58	10.70	1.00	0.00	1	165.69	Heart	Testis	LID not found
6418	257663	H68326	9.78	210.92	21.81	2.00	1.00	1	165.69	Heart	Testis	LID not found
6420	67185	T48308	39.48	224.30	5.71	0.00	1.00	1	165.69	Heart	Testis	LID not found
6424	769376	T62848	12.81	77.90	6.08	1.00	0.00	1	165.69	Heart	Testis	LID not found
6425	805946	AA454813	28.02	184.76	6.35	0.00	1.00	1	165.69	Heart	Testis	LID not found

Table 2A

6426	363175	AA074222	28.46	168.58	5.92	0.00	1.00	11	240.08	Pancreas	Aorta	Germ Cell
6427	868536	AA633577	11.50	155.33	13.51	0.00	2.00	X	184.42	Cervix	Liver	
6440	34070	AA44860	88.21	392.88	5.93	1.00	2.00	8	19.4	Brain	LID not found	Other
6443	784174	AA432106	72.21	417.09	5.78	0.00	1.00	3	347.25	Ear	Stomach	Umbilical cord
6445	50130	H16989	2.33	13.13	3.83	0.00	1.00	2	223.28	Brain	LID not found	Other
6450	245430	N33031	4.14	80.65	19.48	11.00	1.00	4	419.22		Pool	LID not found
6452	589869	AA148213	24.25	160.39	6.61	0.00	1.00	3	542.75	Umbilical cord	Blood	Kidney
6455	270589	N33258	5.01	37.12	7.41	1.00	0.00	17	96.5	Gall bladder	Stomach	Adrenal gland
6456	20064	R44955	137.13	888.45	6.48	1.00	2.00	18	291.03	Brain	Heart	LID not found
6469	33417	R44717	14.14	14.14	5.45	1.00	0.00	5	323.38	Breast	Prostate	Pool
6479	592594	AA155578	202.92	1149.89	5.67	1.00	0.00	3	199.75	Pancreas	Uterus	Heart
6480	32598	R43721	4.97	29.61	6.12	0.00	1.00	5	844.77	Brain	LID not found	Other
6482	856187	AA038028	166.23	861.50	5.18	0.00	2.00	5	121.59	Cervix	Lymph	Adrenal gland
6490	743230	AA400234	77.86	616.12	7.90	5.00	0.00	11	237.93	Trachea	Parathyroid	Thyroid
6497	49704	H15636	10.03	83.28	8.30	0.00	2.00	6	367.03	CNS	Blood	Eye
6498	431803	AA478021	170.98	1007.34	5.89	1.00	0.00	1	674.5	Gall bladder	Bone	Muscle
6506	940753	AA485072	1602.29	10587.00	7.05	2.00	0.00	19	271.02			
6509	45852	H08682	6.19	162.67	31.34	0.00	1.00	1	639.73	CNS	Adrenal gland	Eye
6521	47358	H10983	1.09	21.25	19.46	2.00	0.00	6	524.72	Brain	LID not found	Other
6523	284808	N66750	30.89	190.53	6.17	0.00	1.00	6	477.68	CNS	Thyroid	Skin
6524	291633	N73446	113.94	920.08	8.08	0.00	2.00	5	558.38	Ear	LID not found	Other
6525	47580	H11718	62.53	433.10	6.93	2.00	0.00	15	240.78	Brain	Bone	Brain
6528	39973	R52522	94.50	764.43	8.09	2.00	1.00	19	-8.83	Forebrain	LID not found	Other
6532	489271	AA038214	41.62	309.91	7.45	2.00	1.00	11	317.39	Brain	Uterus	Lung
6546	418651	N67714	35.68	230.40	6.46	2.00	0.00	11	840.65	CNS	Forebrain	Tonsil
6554	280000	N38891	8.63	50.49	7.62	3.00	0.00	7			Prostate	
6562	120515	R10675	9.07	124.63	20.58	4.00	0.00	7	489.04	Mouth	Uterus	
6570	414894	N63087	39.07	269.43	0.90	1.00	0.00	22	86.18	Ignore	Smooth muscle	Colon
6575	347220	N60688	4.39	47.45	10.81	3.00	0.00	11	221.61			
6578	487151	AA043780	33.60	363.84	10.77	3.00	4.00	X	93.95	Breast	Pituitary	Testis
6591	199198	R95841	254.66	1824.02	7.16	3.00	0.00	17	46.83	Tonsil	Heart	Brain
6598	429210	AA007278	4.28	27.01	6.34	1.00	0.00	17			LID not found	Other
6599	365955	AA063568	167.30	1123.88	8.72	2.00	0.00	5	274.89		Forebrain	Pool
6602	271830	N35156	39.36	239.91	5.09	1.00	0.00	3	575.4	Esophagus	Adipose	Forebrain
6604	324148	N45829	90.99	316.27	5.22	0.00	1.00	3	77.44	Ovary	Colon	Gall bladder
6608	282082	N73309	160.67	1020.03	6.35	0.00	1.00	77	476.7	Gall bladder	Bone	Muscle
6622	806185	AA156620	14.13	93.33	8.81	2.00	0.00	8			LID not found	Other
6628	487371	AA046700	12.41	140.18	11.29	2.00	0.00	6	117.04	Small intestine	Thymus	Lung
6633	428932	AA033981	2.98	14.77	5.73	1.00	0.00	12	227.72	Adrenal gland	Ovary	Forebrain
6640	611139	AA483739	109.93	2237.65	20.43	3.00	0.00	15	204.38	Pool	LID not found	Other
6644	756619	AA486438	10.58	53.68	5.07	1.00	0.00	6	118.71	Thymus	Skin	Adipose
6645	428927	AA034058	1.29	372.24	288.89	1.00	0.00	1	650.68	Stomach	Heart	Whole embryo
6646	854444	AA589055	20.16	191.50	9.50	6.00	0.00	22	107.18	Omentum	Muscle	Eye
6672	72395	T51539	11.69	89.65	7.67	1.00	0.00	2	267.86	Pooled	Uterus	Heart
6673	385425	AA025246	117.03	728.09	6.22	2.00	0.00	8	52.62	Pituitary	Tonsil	Parathyroid
6674	302897	N91145	21.72	123.14	5.81	1.00	0.00	8	32.75	Smooth muscle	Synovial mem	Blood
6678	381323	AA017544	4.89	119.62	23.95	14.00	0.00	1				
6680	611443	AA176581	11.86	111.11	0.37	4.00	0.00	22				
6683	480718	AA115761	2.35	46.54	19.78	2.00	0.00	2				
6684	745343	AA625655	3.55	70.07	19.71	2.00	0.00	8				
6691	306420	N92699	3.99	32.06	8.04	2.00	0.00	8				
6693	490870	AA136666	2.74	37.03	13.46	1.00	0.00	8				
6694	795358	AA153485	4.65	41.04	8.46	1.00	0.00	8				
6696	213546	N33274	83.84	501.27	5.99	0.00	2.00	8				

Table 2A

8588	286433	N28175	112.45	735.87	6.54	2.00	0.00	8	440.23	Muscle	Fore skin	Heart
8712	447553	AA702422	51.98	309.09	5.95	1.00	2.00	12	397.57			
8718	771241	AA443587	166.88	1484.29	8.89	2.00	2.00	15	230.38	Uterus	Lymph	Heart
8720	762256	AA454098	27.04	107.68	6.20	0.00	1.00	4	24.02	Liver	Pooled	Lymph
8721	323500	VA5685	295.35	1983.30	6.72	1.00	0.00	4		Brain	LID not found	Other
8728	34008	R44690	9.66	88.35	9.16	2.00	3.00	4		Small intestine	Lymph	Tongue
8730	786278	AA460838	11.29	83.60	7.41	0.00	2.00	4	-8.08	Brain	Whole embryo	LID not found
8731	841396	AA487543	6.54	48.88	7.48	0.00	0.00	4		Spleen	Pool	Testis
8736	48009	R54034	1.88	10.99	5.85	1.00	0.00	1	570.96			
8753	757222	AA488148	6.28	449.41	71.83	2.00	0.00	6	377.78	Stomach	Placenta	Pancreas
8759	43607	H08210	7.46	44.72	5.98	1.00	0.00	2	945.17	Stomach	Breast	Pooled
8764	22374	T82459	65.53	358.59	6.47	0.00	1.00	19	234.81	Colon	LID not found	Other
8770	146225	H13688	9.30	108.65	11.88	1.00	0.00	15	236.81	Brain	Adipose	Ear
8771	154172	R52030	8.68	147.36	16.97	0.00	3.00	13	134.61	Brain	Testis	LID not found
8772	22378	T82461	30.98	244.30	7.90	0.00	0.00	6	40.6	Brain	LID not found	Other
8774	725321	AA291749	14.37	323.40	22.50	1.00	0.00	21	177.48	Ignore	Parathyroid	Thymus
8776	33860	R44640	43.05	441.17	10.25	3.00	5.00	10	358.28	CNS	Stomach	Placenta
8782	47359	H11003	6.25	78.77	12.81	3.00	3.00	8	316.21	Brain	LID not found	Other
8784	41789	R59197	14.53	78.43	5.40	0.00	1.00	8	95.21	Aorta	Ear	CNS
8785	48587	H15114	2.70	20.39	7.55	4.00	0.00	10	446.85	Testis	Brain	Pool
8787	491751	AA150500	23.88	209.55	8.78	1.00	0.00	15	116.7	Brain	Lung	Testis
8788	22393	T87226	11.27	74.60	6.82	0.00	1.00	6	143.7	Ignore	Small intestine	Skin
8789	884462	AA629707	3.20	23.10	7.22	1.00	0.00	1	-3.15		Thymus	Fore skin
8792	33994	R44530	2.89	15.20	5.25	1.00	0.00	1	75.41	Aorta	Parathyroid	
8796	43512	H08220	11.17	60.40	5.41	1.00	0.00	5	350.47	Gall bladder	Skin	
8800	47460	H11454	38.66	365.66	6.48	4.00	3.00	8	95.21	Aorta	Ear	CNS
8804	22131	T88939	23.60	245.83	10.41	2.00	2.00	10	446.85	Testis	Brain	Pool
8808	43588	H15153	0.94	5.74	5.86	0.00	1.00	15	116.7	Brain	Lung	Testis
8809	300240	AA012939	13.32	77.41	5.81	0.00	1.00	6	143.7	Ignore	Small intestine	Skin
8813	133637	R27615	13.90	213.43	15.71	3.00	3.00	1	75.41	Aorta	Parathyroid	
8814	28568	R39111	17.05	172.52	10.11	1.00	0.00	5	350.47	Gall bladder	Skin	
8815	41485	R54073	4.76	39.50	8.32	0.00	1.00	8	95.21	Aorta	Ear	CNS
8816	49810	H15288	3.11	19.28	6.19	1.00	0.00	10	446.85	Testis	Brain	Pool
8817	841314	AA487218	12.77	102.08	7.98	2.00	0.00	15	116.7	Brain	Lung	Testis
8819	810001	AA458678	9.55	245.82	25.73	5.00	0.00	6	143.7	Ignore	Small intestine	Skin
8820	52021	H22568	1.61	31.48	19.58	8.00	0.00	1	-3.15		Thymus	Fore skin
8822	261194	H98215	20.67	135.94	6.58	1.00	0.00	1	75.41	Aorta	Parathyroid	
8828	51559	H18932	2.30	40.76	17.73	3.00	0.00	5	350.47	Gall bladder	Skin	
8829	592728	AA160670	2.80	14.46	5.17	1.00	0.00	8	95.21	Aorta	Ear	CNS
8830	78657	N62914	6.63	43.68	6.59	1.00	1.00	10	446.85	Testis	Brain	Pool
8834	611324	AA170819	222.27	1136.84	5.12	1.00	0.00	15	116.7	Brain	Lung	Testis
8835	41842	R52681	8.68	88.81	10.23	2.00	5.00	6	143.7	Ignore	Small intestine	Skin
8840	272618	N36130	270.30	2000.42	7.40	0.00	0.00	1	75.41	Aorta	Parathyroid	
8842	129020	R10823	13.63	105.83	7.76	0.00	1.00	5	350.47	Gall bladder	Skin	
8844	41945	R56985	18.88	110.16	5.51	1.00	0.00	8	95.21	Aorta	Ear	CNS
8845	72244	T55997	32.67	167.52	5.13	1.00	0.00	10	446.85	Testis	Brain	Pool
8849	510760	AA102053	66.78	380.33	5.70	0.00	1.00	15	116.7	Brain	Lung	Testis
8851	40449	R53258	43.87	362.11	8.23	4.00	3.00	6	143.7	Ignore	Small intestine	Skin
8856	641195	AA487070	95.89	631.29	9.50	2.00	0.00	1	75.41	Aorta	Parathyroid	
8859	650355	AA480184	11.65	92.19	7.92	1.00	0.00	2	586.88	Brain	LID not found	Other
8863	781442	AA428603	4.50	32.34	7.19	1.00	0.00	3	162.35			
8865	45501	H08206	8.48	63.24	7.46	1.00	4.00	21	230.92	Ovary	Spleen	Testis
8869	41070	R36100	9.76	51.53	5.28	1.00	0.00	19	250.4	Pooled	Spleen	Brain
8875	809738	AA454713	19.84	109.53	5.52	0.00	1.00	17	483.28	Synovial mem	Pooled	Umbilical cord

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6860	50477	H17034	45.26	244.57	5.40	0.00	3.00	2	568.11	Brain	Heart
6865	50615	H17513	61.16	399.60	6.53	0.00	1.00	8	118.05	Pool	Forebrain
6880	897576	AA496871	12.94	71.13	5.50	0.00	1.00	2	480.97	Brain	LID not found
6885	40491	R55873	18.09	113.40	7.05	2.00	3.00	2	480.97	Brain	Forebrain
6897	71312	T47625	55.70	682.13	12.26	1.00	2.00	9	392.46	Spleen	Cervix
6901	74738	T57359	35.63	190.20	5.34	2.00	0.00	9	392.46	Spleen	Ovary
6902	564514	AA121697	20.51	105.24	5.13	0.00	1.00			Lung	LID not found
6903	808455	AA415099	225.23	1135.07	5.04	1.00	0.00	X	88.99	Colon	Prostate
6909	86160	T72356	6.50	58.06	8.93	1.00	0.00	9	382.37	Adipose	Cervix
6912	33814	R44714	3.01	23.17	7.70	2.00	0.00	9	382.37	Adipose	LID not found
6914	121256	T66605	24.45	151.19	6.18	1.00	0.00	9	382.37	Adipose	LID not found
6915	281670	N51038	1.63	9.08	5.56	3.00	0.00	9	382.37	Adipose	LID not found
6931	133860	R27975	7.46	44.19	5.93	3.00	0.00	19	101.7	Blood	Parathyroid
6939	247089	N57858	0.84	20.21	21.42	1.00	0.00	X	143.33	Bone	Pool
6944	281290	N72228	0.49	84.31	9.93	1.00	0.00	8	401.87	Forebrain	Placenta
6948	271078	N29918	9.42	102.30	10.86	6.00	0.00	8	401.87	Forebrain	LID not found
6950	192241	R95667	3.56	20.08	5.65	1.00	0.00	12	69.28	Aorta	Cervix
6953	133864	R28660	4.19	68.73	15.92	5.00	0.00	3	182.18	Pool	Parathyroid
6972	239815	H79538	55.96	335.96	6.00	0.00	1.00	1	88.34	Breast	Ovary
6982	101890	AA459278	7.82	42.08	5.32	1.00	0.00	1	88.34	Breast	LID not found
6984	270899	N32502	9.52	57.27	6.01	1.00	0.00	9	24.47	Pool	LID not found
6986	125118	R05293	38.74	202.03	5.21	1.00	0.00	9	24.47	Pool	Other
6990	758338	AA404278	32.23	169.82	5.27	1.00	0.00			Neural	Breast
6995	134011	R31262	4.99	35.81	7.17	1.00	0.00	9	407.26	Placenta	LID not found
7000	207275	H96518	0.97	5.72	7.11	0.00	1.00			Forebrain	Pool
7004	281627	N72978	7.25	51.54	6.00	1.00	1.00	20	287.98	Head and neck	LID not found
7010	323988	V46433	15.18	104.59	6.89	2.00	0.00	11	227.2	Head and neck	Adipose
7012	294535	N71026	6.27	55.78	8.89	3.00	0.00	2	616.05	Brain	Pool
7014	429756	AA052718	9.72	72.55	7.47	1.00	0.00	2	616.05	Brain	Brain
7020	207275	H96518	0.97	5.72	7.11	0.00	1.00	11	334.11	Tonsil	Forebrain
7034	307138	N93721	2.30	14.14	6.16	1.00	0.00	11	363.53	Lung	LID not found
7036	123811	R01448	228.40	1373.17	6.01	1.00	2.00			Pool	LID not found
7037	344654	W72972	7.37	132.81	18.02	8.00	3.00	10	508.28	Kidney	Parathyroid
7043	269258	N30008	81.41	614.11	7.54	2.00	0.00			Breast	Placenta
7046	359689	W96473	4.72	26.85	5.70	1.00	0.00			Colon	Lung
7047	324333	AA284108	40.55	225.22	5.55	1.00	0.00			Tonsil	Prostate
7053	321888	W37628	11.76	114.54	6.84	1.00	0.00			Aorta	Tonsil
7057	299182	H60553	4.89	30.57	6.25	0.00	1.00			Spleen	Lung
7060	207932	H60553	131.17	903.67	0.89	2.00	2.00			Pool	LID not found
7061	321908	W37660	5.20	98.20	18.89	9.00	3.00	5	287.05	Pancreas	Forebrain
7064	768600	AA435900	2.08	24.85	12.08	7.00	0.00	3	161.52	Gall bladder	Lymph
7072	250883	N23454	28.30	198.46	7.01	0.00	1.00	12	246.56	Forebrain	Forebrain
7075	143146	R73661	161.71	1126.96	6.97	2.00	0.00			Kidney	LID not found
7078	417059	W87801	12.82	85.35	6.68	2.00	4.00	11	130.57	CNS	Placenta
7079	503334	AA134111	14.22	88.89	6.25	1.00	0.00	2	174.16	Umbilical cord	Larynx
7080	877827	AA525632	1739.50	9099.75	5.23	1.00	0.00			Breast	Stomach
7087	345034	W72294	7.49	552.19	73.72	5.00	0.00	8	98.74	Pancreas	Pool
7090	245174	N84466	53.28	299.58	5.62	0.00	1.00			Umbilical cord	LID not found
7092	240878	H90296	120.80	1407.02	11.65	4.00	3.00	1	111.21	Pancreas	Heart
7093	347813	W81504	12.41	71.32	5.75	0.00	1.00	3	43.98	Prostate	Forebrain
7094	460276	AA057559	8.44	61.42	9.65	1.00	0.00			Uterus	Testis
7096	460114	AA676840	6.39	41.43	6.48	1.00	0.00	13	268.41	Pooled	Whole embryo
7097	298104	N70759	23.56	165.43	7.19	0.00	1.00	4	17.79	Ovary	Parathyroid
7106	769712	AA428959	10.84	53.49	5.03	1.00	0.00			Pool	Pool

Table 2A

7106	57623	T49530	7.62	72.88	9.56	0.00	1.00	18	347.76	Uterus	Placenta	Pool
7110	397495	AA701081	3.32	16.27	5.50	2.00	0.00	5	29.67	Brain	LID not found	Other
7111	47355	H10981	2.28	19.97	8.82	1.00	0.00	19	283.98	Pancreas	Umbilical cord	Umbilical cord
7114	264546	N20338	2.28	12.36	5.42	1.00	0.00	20	333.71	Peripheral nar	Cervix	Umbilical cord
7132	69538	T49602	15.20	151.47	10.56	2.00	0.00	17	24.51	Neural Eye	Heart	Thyroid
7134	51743	H23081	179.73	1030.55	5.73	1.00	0.00	11	239.68	Blood	Placenta	Ovary
7139	344430	W73473	7.12	470.67	66.11	6.00	0.00	7	424.13	CNS	Acetonal gland	Pooled
7140	70152	T50041	44.92	235.82	5.25	1.00	0.00	2	681.48	Peripheral nar	Brain	Aorta
7152	80228	T64216	0.72	4.13	5.71	0.00	1.00	7	511.27	Parathyroid	Forebrain	Forebrain
7153	146888	R80779	5.70	51.01	8.85	1.00	0.00	8	186.21	Synovial mem	Smooth musc	Ear
7159	78743	T62577	60.57	399.75	5.11	1.00	0.00	14	251	Liver	Spleen	Pool
7165	450453	AA682815	5.13	35.84	6.98	0.00	2.00	1	619.07	Brain	LID not found	Other
7187	51070	H17115	6.52	37.80	5.80	1.00	0.00	12	246.66	Placenta	LID not found	Other
7172	77193	T50121	14.64	77.62	5.30	1.00	0.00	1	284.5	Testis	Brain	LID not found
7167	154472	R54848	61.81	308.99	5.89	1.00	0.00	14	175.36	Brain	LID not found	Other
7164	248412	N85558	3.15	15.91	5.05	1.00	0.00	9	21.93	Brain	LID not found	Other
7198	71793	T51250	24.04	319.47	13.29	4.00	5.00	8	433.96	Small intestine	Colon	LID not found
7209	41548	R65415	14.47	147.95	10.23	5.00	5.00	1	285.5	Uterus	Placenta	Kidney
7215	60582	T40688	49.42	314.59	6.37	0.00	2.00	5	283.38	Aorta	-	Kidney
7216	40108	R52853	14.47	90.66	6.27	0.00	2.00	12	277.86	Brain	LID not found	Other
7221	51639	H23958	2.78	45.22	16.25	6.00	1.00	5	590.59	Eye	Synovial mem	Kidney
7232	40036	R53442	77.36	623.19	8.12	0.00	4.00	4	558.81	Pool	Brain	Lung
7245	51387	H18417	2.07	10.70	5.16	1.00	0.00	8	326.36	Umbilical cord	Smooth musc	Thyroid
7246	511806	AA088861	65.14	892.20	10.48	5.00	5.00	5	542.07	Brain	LID not found	Other
7247	278577	AA68599	41.02	237.30	6.27	0.00	2.00	11	262.56	Liver	Whole embryo	LID not found
7248	32095	R42898	84.42	625.57	7.41	4.00	4.00	1	562.43	Synovial mem	Thyroid	Blood
7253	51103	H19217	1.31	8.03	6.12	1.00	0.00	20	74.7	Ear	Placenta	Parathyroid
7254	324122	W46577	70.03	484.02	6.91	0.00	2.00	12	262.56	Prostate	Testis	LID not found
7277	52432	H23258	1.86	10.30	5.55	0.00	1.00	1	562.43	Synovial mem	Thyroid	Blood
7278	855523	AA684180	30.62	1750.51	57.17	3.00	0.00	5	542.07	Brain	LID not found	Other
7285	52065	H24347	2.15	17.94	8.33	1.00	1.00	8	326.36	Umbilical cord	Smooth musc	Thyroid
7287	744565	AA671256	45.43	237.63	5.23	0.00	1.00	5	542.07	Brain	LID not found	Other
7288	40768	R56432	118.71	1367.55	11.52	4.00	2.00	11	262.56	Prostate	Testis	LID not found
7289	39770	R54558	2.09	13.28	6.38	0.00	1.00	1	562.43	Synovial mem	Thyroid	Blood
7292	81638	T41002	3.96	28.10	6.59	1.00	0.00	20	74.7	Ear	Placenta	Parathyroid
7294	324715	W47362	6.80	107.28	15.77	8.00	0.00	12	469.78	Thymus	Skin	Testis
7298	122183	T98628	12.25	69.14	5.40	1.00	0.00	16	423.94	Blood	Germ Cell	Aorta
7302	610567	AA484378	52.78	171.37	5.20	0.00	1.00	8	334.17	CNS	Blood	CNS
7306	430284	AA010557	15.95	129.35	8.11	3.00	5.00	3	726.84	Brain	LID not found	Other
7314	415250	W91885	51.41	315.39	6.14	2.00	0.00	6	172.31	Nose	Spleen	Placenta
7322	809609	AA458486	19.20	107.04	5.57	1.00	0.00	7	586.57	Heart	LID not found	Other
7324	290231	N82273	7.16	43.02	6.01	1.00	0.00	1	740.99	CNS	Uterus	Pool
7332	271280	N34637	211.90	1086.74	5.13	1.00	0.00	10	185.42	Nose	Whole embryo	LID not found
7335	418279	W80323	30.51	351.39	11.52	1.00	0.00	8	118.48	Small intestine	Thymus	Lung
7338	234121	H70603	24.14	180.89	7.49	2.00	0.00	5	81.28	Forebrain	Whole embryo	Germ Cell
7339	281162	N50982	7.04	39.13	5.56	1.00	0.00	18	423.94	Blood	CNS	CNS
7340	288687	N82080	17.77	210.46	11.85	6.00	5.00	8	334.17	CNS	LID not found	Other
7353	178558	H49517	427.45	2222.49	5.20	1.00	0.00	3	726.84	Brain	LID not found	Other
7356	810727	AA459718	8.53	277.32	29.09	10.00	1.00	6	172.31	Nose	Spleen	Placenta
7357	201217	R99253	98.79	571.85	5.79	3.00	0.00	7	586.57	Heart	LID not found	Other
7358	505697	AA147854	3.78	28.48	7.00	1.00	0.00	1	740.99	CNS	Uterus	Pool
7370	428749	AA004652	8.89	71.11	8.00	0.00	4.00	10	185.42	Nose	Whole embryo	LID not found
7383	201855	H48251	107.45	868.70	6.08	2.00	0.00	8	118.48	Small intestine	Thymus	Lung
7416	855347	AA684185	65.02	853.56	13.28	3.00	0.00	5	81.28	Forebrain	Whole embryo	Germ Cell
7418	272038	N31948	2.92	92.77	31.75	1.00	0.00	8	118.48	Small intestine	Thymus	Lung

Table 2A

7427	378475	AA041395	104.18	533.03	5.12	1.00	0.00	17	53.69	Lung	Placenta	Ovary
7432	857284	AA069889	17.25	137.53	7.97	0.00	1.00	6	368.74	Brain	Foreskin	Colon
7434	359285	AA016234	36.46	518.88	14.23	0.00	1.00				Heart	Kidney
7440	283925	N63943	129.20	781.43	5.69	1.00	2.00	16	162.07	Pool	LID not found	Other
7449	410730	N69521	12.76	74.51	5.93	1.00	0.00					
7465	210486	H66478	101.51	1175.82	6.14	1.00	0.00	10	459.96	Umbilical cord	Thyroid	Ear
7466	762782	AA448167	14.83	512.53	34.96	6.00	0.00	13	136.15	Lymph	Blood	Heart
7466	272890	N36123	65.27	356.56	5.62	2.00	0.00	3	418.03	Ovary	Whole embryo	Prostate
7468	741860	AA402883	6.99	159.54	22.82	4.00	0.00	9	123.72	Small intestine	Head and neck	Esophagus
7468	855910	AA630328	43.72	219.10	5.01	1.00	0.00	14		CNS	Eye	Kidney
7468	243355	N62156	5.42	47.59	8.76	1.00	1.00	19	244.11	Placenta	Pool	Parathyroid
7468	257182	N30553	3.88	66.74	17.21	0.00	1.00	18	195.94	Pancreas	Podod	Eye
7488	362059	AA001432	8.32	141.96	17.05	1.00	1.00	9	228.16	Eye	Colon	Aorta
7490	24818	R39069	7.28	41.29	5.87	1.00	0.00	10	32.40	Eye	Skin	Esophagus
7493	510381	AA055585	37.95	312.00	0.24	2.00	0.00	8	417.63	Tonsil	Blood	Parathyroid
7494	806828	AA455521	13.11	127.97	9.76	1.00	0.00	7	624.62	Brain	LID not found	Other
7496	48051	H09064	11.43	63.49	5.55	0.00	1.00	8	278.6	Brain	LID not found	Other
7500	50647	H17829	10.39	60.06	5.78	1.00	0.00	1	192.55			
7504	47459	H11453	3.99	111.48	27.93	7.00	0.00	2	487.92	Brain	Kidney	LID not found
7516	50749	H08541	1.57	8.90	5.65	2.00	1.00	8				
7516	50749	H17322	4.74	56.00	11.82	4.00	5.00	9	137.48	Ovary	Blood	Brain
7517	770424	AA430875	20.00	128.48	6.43	1.00	0.00	6	116.42	Adrenal gland	Lymph	Cervix
7523	773479	AA427698	303.30	1768.94	5.80	0.00	1.00	2	358.74	Brain	LID not found	Other
7532	50173	H17484	23.31	224.14	6.62	2.00	5.00	3	190.69	CNS	Brain	Eye
7533	32304	R42894	6.10	86.28	10.87	3.00	0.00	16	48.86	Podod	Blood	Adrenal gland
7534	742115	AA405800	22.26	175.16	7.87	5.00	0.00	8	447.65	Brain	LID not found	Other
7540	22541	T89084	1.02	6.25	6.10	0.00	1.00	16	365.99	Brain	Breast	Prostate
7541	140574	R66139	4.20	72.19	17.20	2.00	0.00	8	438.63			
7546	835490	AA630320	18.99	106.74	5.62	1.00	0.00	10	499.34	Ear	Placenta	CNS
7551	89935	T48692	18.11	106.23	5.87	1.00	0.00			Brain	Testis	Lung
7554	41648	R52786	18.22	94.88	5.21	0.00	1.00	13	147.98	Whole embryo	Pancreas	CNS
7555	196489	R91539	17.69	110.72	6.26	2.00	0.00	16	193.03	Lymph	Brain	LID not found
7556	34010	R44647	41.18	374.58	9.10	6.00	5.00	4	450.16	Placenta	Pancreas	Ovary
7557	135630	R31562	10.59	64.53	6.10	2.00	1.00				Prostate	Kidney
7571	743081	AA405901	76.80	579.47	7.35	0.00	1.00				LID not found	Other
7576	32716	H29245	1.27	15.94	12.50	0.00	2.00	11	37.97	Skin	Podod	Germ Cell
7578	773106	AA426316	18.63	103.70	5.57	1.00	0.00	5	576.31	Adipose	Stomach	Prostate
7582	291885	N73101	23.88	799.69	33.80	4.00	1.00	19	284.15	Pool	Brain	Lung
7583	50298	H17654	2.84	15.39	5.42	1.00	0.00	4	437.92	Tonsil	LID not found	Other
7592	51828	H22846	152.48	1025.58	6.73	1.00	3.00					
7595	248027	N59372	94.78	613.02	6.21	2.00	2.00	4		Brain	LID not found	Other
7600	49993	H26738	15.04	81.94	5.45	0.00	1.00	3	48.58	Umbilical cord	vein	Synovial membrane
7601	41607	R64177	222.16	1266.36	5.79	1.00	1.00	2	358.03	Ovary	Blood	Podod
7603	279045	N51705	46.41	280.13	6.04	2.00	0.00	14	182.86	Podod	CNS	Germ Cell
7612	262812	H98559	84.43	445.79	5.28	1.00	0.00			Thymus	CNS	Pancreas
7621	67187	T52652	341.51	1997.97	5.85	1.00	0.00			Liver	Eye	Ovary
7624	84211	T72915	29.41	169.43	5.79	1.00	0.00	1	35.21	CNS	Muscle	Whole embryo
7627	609155	AA170667	15.19	96.55	6.36	0.00	1.00	10	360.96	Brain	Testis	Germ Cell
7631	757265	AA426113	16.72	136.39	8.87	1.00	2.00	11	259.91			LID not found
7633	50589	H17046	35.92	328.24	9.14	2.00	5.00	8	407.58	Colon	Cervix	Blood
7636	772818	AA478913	21.48	169.22	7.69	0.00	1.00					Other
7646	772818	AA478913	2.72	26.43	9.72	3.00	0.00					
7657	25414	R20662	2.72	26.43	9.72	3.00	0.00					
7660	840092	AA490249	47.31	339.43	7.18	1.00	0.00					
7662	510736	AA095746	5.97	42.15	7.08	1.00	0.00					

Table 2A

7672	46563	H09759	6.60	35.10	5.32	1.00	0.00	Whole embryo/LID not found
7673	41103	R46769	61.03	633.49	10.38	1.00	3.00	LID not found Other
7677	43318	H08734	15.21	76.21	5.01	0.00	1.00	Parathyroid
7688	264105	N20577	79.93	400.02	5.00	1.00	0.00	Tonsil
7700	261687	H98780	324.08	1849.12	5.71	1.00	0.00	Forebrain
7707	282334	R33037	7.07	49.53	7.00	1.00	0.00	Germ Cell
7709	282334	H93594	220.65	1603.13	7.27	3.00	0.00	LID not found Other
7712	272531	N35689	23.74	130.74	5.51	2.00	0.00	Brain
7714	782269	A4431746	10.11	52.08	5.15	1.00	0.00	Prostate
7715	795730	A4460282	9.82	52.06	5.30	1.00	0.00	CNS
7718	386763	A4029331	11.83	97.51	8.24	2.00	0.00	Muscle
7720	269787	N27145	6.78	38.34	5.80	1.00	0.00	Forebrain
7722	809467	A4443105	11.92	67.44	5.66	0.00	1.00	Pancreas
7731	360025	A4063573	2.14	12.19	5.69	1.00	0.00	Spleen
7740	415111	W93147	6.44	43.25	6.71	3.00	0.00	Tonsil
7742	430336	A4010619	0.92	8.25	8.96	1.00	0.00	LID not found Other
7748	430726	A4011678	10.31	87.94	6.59	0.00	1.00	Pool
7750	427831	A4001883	4.22	22.29	5.28	1.00	0.00	Tonsil
7751	248741	N59219	5.70	43.43	7.82	2.00	0.00	CNS
7752	375853	A4039857	20.17	121.87	6.03	1.00	1.00	Forebrain
7782	128882	R17088	8.39	65.40	7.79	1.00	0.00	Heart
7771	291059	N27116	135.69	895.23	8.62	3.00	0.00	Colon
7774	427893	A4001359	9.85	56.52	5.74	1.00	0.00	Forebrain
7780	429499	A4011480	8.29	43.83	5.30	0.00	1.00	LID not found Other
7791	415582	W80701	5.98	359.44	60.12	20.00	1.00	Prostate
7798	502593	A4136049	1.00	7.22	7.25	1.00	0.00	Pool
7804	263097	N99738	42.15	344.25	6.17	3.00	0.00	Neural
7808	505183	A4161111	112.19	620.11	5.53	1.00	0.00	Uterus
7814	810002	A4454864	21.22	191.72	9.04	6.00	1.00	535.4 Uterus
7816	298052	N70734	3.83	27.97	7.71	2.00	0.00	111.36 Adipose
7818	384085	A4035745	5.14	27.49	5.34	1.00	0.00	863.61 Heart
7820	247482	N54157	17.34	100.47	5.76	0.00	2.00	476.39 Germ Cell
7821	375333	A4041263	10.15	68.51	6.75	1.00	0.00	106.17 Pool
7827	197265	R66970	1.80	12.09	8.32	1.00	0.00	17.11
7833	490764	A4133194	1.33	8.69	6.53	1.00	0.00	Tonsil
7836	211367	H66670	482.02	3163.12	6.64	0.00	2.00	Muscle
7840	289428	N53949	9.38	52.36	5.58	1.00	0.00	289.6 Muscle
7842	129227	R11047	27.31	185.70	6.80	0.00	1.00	504.52 Liver
7843	106578	R91609	60.78	592.31	6.52	2.00	0.00	CNS
7844	211865	H68710	7.06	123.70	17.10	3.00	0.00	592.45 Tonsil
7846	810263	A4464728	51.66	303.66	5.86	1.00	0.00	Kidney
7847	417867	W60128	62.61	528.71	8.41	2.00	0.00	Pool
7852	289452	N74625	7.86	104.35	13.23	4.00	3.00	599.98 Colon
7854	810320	A4464140	3.47	25.03	7.21	2.00	0.00	394.49 Ovary
7858	258017	N32811	12.73	450.62	6.20	2.00	0.00	77.53 Smooth muscle
7860	283110	N63846	44.70	732.45	18.33	3.00	3.00	Pool
7862	770860	A4434388	280.85	2734.72	8.74	2.00	0.00	Ovary
7863	357138	W63523	7.99	41.66	5.22	1.00	0.00	LID not found Other
7867	201071	R98847	123.03	1038.88	8.44	3.00	0.00	Lymph
7876	72426	T31592	135.03	1063.12	8.04	2.00	0.00	Heart
7878	212115	H66885	178.08	1043.98	5.83	2.00	0.00	Uterus
7883	741677	A401441	51.32	599.25	11.89	2.00	0.00	Esophagus
7900	72816	T31895	5.01	41.17	8.22	2.00	0.00	26.79 Pooled
7901	624443	A4181333	1.35	16.06	11.85	1.00	0.00	Placenta
7908	73561	T55592	12.72	78.28	6.15	1.00	0.00	Gall bladder

Table 2A

7915	342181	W83749	16.94	317.86	16.76	1.00	0.00	18	414.52	Thyroid	Fore skin	CNS
7916	32517	R43271	6.35	38.08	5.89	2.00	0.00	19	193.03	Pancreas	Pancreas	Kidney
7922	141465	R73564	3.35	28.63	8.54	1.00	0.00			Brain	Ovary	Uterus
7927	52226	H23265	3.45	61.73	16.93	7.00	1.00			Head and nec	Thymus	Cervix
7930	69184	T54144	187.62	1000.39	5.30	0.00	4.00			CNS	Lung	LID not found
7938	80012	T70032	64.91	520.69	8.02	1.00	3.00			Uterus	Germ Cell	Whole embryo
7937	194238	R83277	97.87	759.02	7.77	1.00	3.00			Smooth musc	Whole embryo	Lung
7938	41358	R59167	38.17	457.65	12.00	0.00	1.00			Small intestine	Smooth musc	Fore skin
7940	72016	T62326	94.28	859.21	9.11	0.00	2.00			Small intestine	Smooth musc	Fore skin
7949	970613	A4683102	25.46	161.66	6.35	2.00	0.00			Small intestine	Smooth musc	Fore skin
7954	433007	A4689732	4.03	39.06	9.69	0.00	1.00			Small intestine	Smooth musc	Fore skin
7961	243159	H94471	4.48	52.60	11.73	6.00	2.00			Small intestine	Smooth musc	Fore skin
7968	85224	T71578	54.33	323.37	5.95	0.00	1.00			Small intestine	Smooth musc	Fore skin
7977	33989	R44538	28.10	207.09	7.92	2.00	0.00			Small intestine	Smooth musc	Fore skin
7985	34014	R44504	2.16	14.37	6.65	2.00	1.00			Small intestine	Smooth musc	Fore skin
7992	46819	H10228	12.04	64.81	5.38	2.00	2.00			Small intestine	Smooth musc	Fore skin
7993	46287	H08220	4.68	31.48	6.75	1.00	2.00			Small intestine	Smooth musc	Fore skin
7994	710704	AA476294	106.98	1442.59	13.44	0.00	3.00			Small intestine	Smooth musc	Fore skin
7995	836698	AA504658	30.40	421.61	13.66	1.00	0.00			Small intestine	Smooth musc	Fore skin
8001	51747	H24327	15.84	124.19	7.84	2.00	3.00			Small intestine	Smooth musc	Fore skin
8001	41850	R52786	2.93	48.37	18.84	4.00	0.00			Small intestine	Smooth musc	Fore skin
8005	49687	H15250	2.26	22.85	10.10	2.00	2.00			Small intestine	Smooth musc	Fore skin
8012	71591	T48011	28.49	162.69	5.71	2.00	0.00			Small intestine	Smooth musc	Fore skin
8013	50895	H18456	2.18	13.55	6.20	0.00	1.00			Small intestine	Smooth musc	Fore skin
8021	50240	H17063	8.03	49.47	6.18	2.00	3.00			Small intestine	Smooth musc	Fore skin
8023	78738	T61888	9.63	66.65	9.92	0.00	2.00			Small intestine	Smooth musc	Fore skin
8025	52543	H23482	6.32	35.50	6.26	1.00	0.00			Small intestine	Smooth musc	Fore skin
8026	69493	T48649	280.13	3420.38	11.83	2.00	0.00			Small intestine	Smooth musc	Fore skin
8026	50860	H17081	5.08	41.26	8.15	4.00	4.00			Small intestine	Smooth musc	Fore skin
8032	45999	H09317	98.43	1055.20	10.94	3.00	4.00			Small intestine	Smooth musc	Fore skin
8038	730288	AA412509	16.90	105.62	6.49	1.00	1.00			Small intestine	Smooth musc	Fore skin
8045	51020	H19312	88.66	821.16	9.28	2.00	0.00			Small intestine	Smooth musc	Fore skin
8055	34364	R44210	23.88	225.88	9.46	4.00	0.00			Small intestine	Smooth musc	Fore skin
8057	47452	H11448	48.02	482.46	10.48	3.00	3.00			Small intestine	Smooth musc	Fore skin
8058	592111	AA150532	5.84	76.09	13.03	5.00	0.00			Small intestine	Smooth musc	Fore skin
8058	795837	AA461511	15.79	170.63	10.81	1.00	0.00			Small intestine	Smooth musc	Fore skin
8061	48781	H19653	21.47	1731.38	8.19	2.00	2.00			Small intestine	Smooth musc	Fore skin
8063	773446	AA426049	50.11	307.25	5.48	1.00	0.00			Small intestine	Smooth musc	Fore skin
8070	795758	AA460304	115.08	797.22	6.93	1.00	0.00			Small intestine	Smooth musc	Fore skin
8085	811138	AA485730	21.28	287.53	13.51	1.00	0.00			Small intestine	Smooth musc	Fore skin
8087	429685	AA011588	16.54	142.68	8.83	8.00	0.00			Small intestine	Smooth musc	Fore skin
8086	365004	AA024832	507.22	3348.21	6.60	2.00	0.00			Small intestine	Smooth musc	Fore skin
8096	418945	W87710	22.16	188.26	7.59	4.00	3.00			Small intestine	Smooth musc	Fore skin
8099	306921	H91962	37.34	212.50	5.89	1.00	0.00			Small intestine	Smooth musc	Fore skin
8103	194156	H51050	29.21	180.89	5.19	2.00	0.00			Small intestine	Smooth musc	Fore skin
8104	359604	AA011100	2.87	19.37	6.74	1.00	0.00			Small intestine	Smooth musc	Fore skin
8106	468085	AA043092	8.85	135.78	15.35	8.00	1.00			Small intestine	Smooth musc	Fore skin
8111	184023	H51271	27.11	186.67	6.89	1.00	0.00			Small intestine	Smooth musc	Fore skin
8112	282315	N51981	19.02	141.62	7.44	3.00	0.00			Small intestine	Smooth musc	Fore skin
8116	288336	N71147	21.75	165.68	7.62	0.00	3.00			Small intestine	Smooth musc	Fore skin
8116	358936	W92233	3.90	19.07	5.01	1.00	0.00			Small intestine	Smooth musc	Fore skin
8118	386763	AA029703	7.16	43.55	6.09	1.00	0.00			Small intestine	Smooth musc	Fore skin
8122	811038	AA485424	20.92	129.21	6.18	1.00	0.00			Small intestine	Smooth musc	Fore skin
8127	276992	W87001	2.36	13.17	5.58	1.00	0.00			Small intestine	Smooth musc	Fore skin
8128	770840	AA427733	4.27	75.03	17.59	3.00	0.00			Small intestine	Smooth musc	Fore skin

Table 2A

8144	306066	N91003	5.22	64.81	12.42	2.00	1.00	CNS	Adrenal gland	Parathyroid
8154	H63859	H63859	58.77	590.30	10.04	3.00	0.00	Blood	LID not found	CNS
8162	207199	N40917	5.84	30.71	5.26	1.00	0.00	Uterus	Colon	Pool
8163	298909	N70848	82.67	502.00	6.07	2.00	0.00	Blood	Ovary	Colon
8165	431097	AA138888	0.21	38.83	5.93	1.00	0.00	Blood	Colon	Pool
8165	770909	AA430629	1200.46	6828.70	6.69	1.00	0.00	Blood	Colon	Pool
8172	325641	W51885	7.26	46.71	6.41	0.00	1.00	63.51 Symovial men	Umbilical cord	Lymph node
8176	846444	AA629897	4.67	188.85	30.21	6.00	0.00	488.22 Pool	LID not found	Other
8178	263988	N53360	98.69	939.12	10.47	2.00	0.00	61.88 Gall bladder	Umbilical cord	Foreskin
8182	771142	AA427778	140.87	813.47	5.78	1.00	0.00	56.88 Spleen	Blood	CNS
8183	271167	N40952	18.94	118.12	5.92	1.00	0.00	71.41 Trachea	Bone marrow	Pooled
8184	460487	AA677706	3.07	665.15	216.92	1.00	0.00	Adrenal gland	Adipose	Uterus
8189	487317	AA043800	3.53	22.09	6.28	1.00	0.00	576.51		
8191	81612	AA455013	8.83	111.24	12.60	2.00	0.00	Pool	LID not found	Other
8192	138359	R68108	10.67	56.09	5.44	1.00	0.00	Colon	Pool	LID not found
8193	427697	AA001884	36.11	189.63	5.50	1.00	0.00	553.01 Gall bladder	Thyroid	Breast
8194	245680	N53355	20.20	263.88	9.01	3.00	0.00	272.85 Peripheral ner	Germ Cell	Pancreas
8195	347035	W81135	36.83	219.77	6.97	0.00	1.00	Uterus	Kidney	LID not found
8196	780947	AA429661	5.58	30.05	5.38	2.00	0.00	Uterus	Lung	LID not found
8197	501479	AA115328	1.91	21.54	11.30	6.00	0.00	Testis	Parathyroid	Kidney
8205	501854	AA127895	5.30	47.94	10.66	1.00	0.00	227.72 Esophagus	Prostate	Whole embryo
8206	793755	AA463313	4.40	46.88	10.66	1.00	0.00	44.64 Pool	Ovary	LID not found
8208	1035889	AA628189	3.86	78.58	20.38	2.00	1.00	227.72 Colon	Omentum	Lymph node
8215	207638	H60296	4.92	86.36	13.91	1.00	0.00	Pool	LID not found	Other
8216	855521	AA664179	113.25	1550.11	13.69	5.00	0.00	549.96		
8217	430673	AA010000	5.68	42.92	7.58	2.00	0.00	516.86 Stomach	Eye	Cervix
8219	322641	W15318	2.21	29.98	13.58	2.00	0.00	422.8 Ovary	Uterus	Testis
8220	361122	AA017379	5.73	57.70	10.07	1.00	0.00	397.3 Thymus	Foreskin	Placenta
8228	809857	AA455128	18.13	101.19	5.29	2.00	0.00	Prostate	Pool	LID not found
8231	195357	R36992	183.22	1413.03	7.71	2.00	0.00	Foreskin	Lung	Pool
8233	417761	W88725	18.49	325.08	17.58	6.00	0.00	37.19		
8234	291594	N67810	155.42	922.84	5.94	2.00	0.00	309.04 Small intestine	Colon	LID not found
8238	192188	H41144	188.31	2263.91	12.69	2.00	0.00	309.17		
8240	586788	AA133469	13.32	81.81	6.15	2.00	0.00	524.84 Whole embryo	Ovary	Colon
8248	893076	AA679907	9.58	94.38	8.65	6.00	0.00	26.78 Gall bladder	Blood	Lymph
8250	291241	N72210	35.63	264.93	8.30	2.00	0.00	253.63 Head and nec	Blood	Pancreas
8254	770898	AA034411	16.63	63.85	5.03	1.00	0.00	151.92 Brain	LID not found	Other
8257	610002	AA052932	1.07	27.77	9.77	3.00	0.00	880.09 Brain	LID not found	Other
8258	277188	N40945	2.83	27.65	10.37	4.00	0.00	336.64 Whole embryo	Foreskin	Pool
8263	499353	H23276	32.06	332.56	5.46	1.00	0.00	Brain	LID not found	Other
8264	402177	R55658	1.75	8.54	5.61	0.00	1.00	487.91 Whole embryo	CNS	Brain
8265	263118	N20106	3.67	17.87	6.03	2.00	0.00	Ignora	Brain	Prostate
8272	474000	H10413	2.82	20.09	7.67	1.00	0.00	Eye	Ear	Brain
8276	24081	R37568	9.23	51.58	6.59	1.00	0.00	Brain	LID not found	Other
8278	755228	AA466334	3.49	55.63	16.04	1.00	0.00	126.78		
8280	52704	H28227	2.86	64.43	21.80	1.00	0.00	411.77 Germ Cell	Brain	Prostate
8289	177772	H45978	6.41	49.22	7.68	2.00	0.00	Eye	Ear	Brain
8292	41835	R54212	2.70	53.38	18.74	4.00	0.00	Brain	LID not found	Other
8314	845663	AA070155	32.08	204.40	6.37	2.00	0.00	11		
8317	460669	AA700322	4.20	87.39	20.68	3.00	0.00	5	Breast	Pool
8320	469383	H06501	50.03	357.26	7.14	0.00	5.00	355.29 Bone	Muscle	Brain
8329	345525	W72437	49.22	522.50	10.61	0.00	1.00	277.15 Stomach	Eye	Kidney
8346	490819	AA122287	6.91	38.19	5.24	1.00	0.00	Smooth musc	Umbilical cord	CNS
8353	798178	AA461088	88.06	496.57	5.64	1.00	0.00	154.22 Breast	Kidney	Lung
8359	172377	AA404565	46.90	238.81	5.05	1.00	0.00			

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8362	744017	AA443706	0.72	7.06	9.87	1.00	1.00	Aorta	Lung	Brain
8365	742843	AA448261	4.35	40.52	9.38	4.00	0.00	Testis	Pool	LID not found
8374	487327	AA045524	9.70	288.81	29.76	6.00	0.00	Uterus	Heart	Breast
8376	49203	H15695	8.34	147.99	17.74	2.00	0.00	Prostate	Whole embryo	Kidney
8377	52618	H29303	71.11	490.54	6.90	1.00	1.00	4	494.82	Prostate
8378	730439	AA489975	15.90	100.37	0.46	3.00	0.00	X	245.06	Neck
8378	744212	AA468664	7.32	44.00	8.01	2.00	0.00	14	278.76	Ear
8384	744212	AA468664	7.32	44.00	8.01	2.00	0.00	5	62.6	Ear
8386	428640	AA011637	15.77	111.34	7.08	0.00	3.00	Cervix	Lymph	Parathyroid
8388	797038	AA463516	82.25	417.76	5.08	1.00	0.00	3	81.75	Smooth muscle
8392	73785	T54672	6.75	56.21	8.33	1.00	0.00	2	127.04	Spleen
8395	798867	AA466247	23.97	221.39	9.24	1.00	0.00	15	184.58	Stomach
8398	950700	AA608572	103.96	889.28	8.55	2.00	0.00	10	363.57	Bone
8402	826058	AA211459	104.95	538.01	5.05	0.00	1.00	12	271.72	Head and neck
8405	796127	AA460955	132.31	713.23	5.39	1.00	1.00	19	66.18	Placenta
8413	71157	T47971	128.36	866.36	6.70	2.00	0.00	8	401.76	Forebrain
8416	81015	H19207	10.51	86.75	8.25	1.00	0.00	6	430.1	Ear
8419	784229	AA468887	382.95	3025.93	7.90	2.00	2.00	3	697.77	Thyroid
8422	77073	AA425302	34.62	205.57	5.94	2.00	0.00	11	168.43	Pool
8428	430172	AA010247	18.15	124.13	6.48	0.00	1.00	2	354.01	Aorta
8433	51166	H17143	163.93	1729.28	10.55	4.00	4.00	11	428.27	Smooth muscle
8438	580053	AA135001	6.15	53.05	8.62	1.00	0.00	21	137.85	Smooth muscle
8445	62763	T41173	34.90	254.14	7.28	0.00	1.00	8	13.47	Ear
8446	253733	N22552	7.41	46.90	6.33	1.00	0.00	10	392.03	Pool
8448	418350	V62772	5.67	36.30	6.40	2.00	0.00	16	372.81	Lung
8452	307157	N93740	157.92	1059.74	8.71	1.00	0.00	13	31.46	Ear
8458	487981	AA054722	75.56	453.45	6.00	1.00	0.00	17	53.48	Aorta
8495	504372	AA142842	53.29	284.46	5.34	1.00	0.00	3	491.75	Stomach
8498	247281	N57950	48.41	284.35	6.13	2.00	1.00	20	28.83	Stomach
8502	297899	N70059	30.25	228.02	7.47	2.00	1.00	8	510.24	Eye
8506	241648	H81615	13.30	131.27	9.87	3.00	0.00	3	410.83	Forebrain
8510	782784	AA448182	14.21	77.12	5.43	1.00	0.00	17	518.96	Brain
8516	302180	N79989	7.88	68.22	8.66	1.00	0.00	10	460.83	Adipose
8528	281558	N72882	107.53	554.40	5.16	1.00	0.00	11	232.44	Pool
8531	809731	AA455509	7.08	72.02	10.17	0.00	0.00	10	442.78	Pool
8532	258242	N30855	6.78	53.88	9.31	1.00	0.00	18	13.7	Spleen
8538	811048	AA485428	10.80	67.50	6.25	1.00	0.00	X	245.06	Pool
8542	201440	R99105	7.19	67.44	12.16	8.00	0.00	3	143.02	Pool
8547	203008	H54283	40.12	206.61	5.12	1.00	0.00	1	553.7	Placenta
8558	771257	AA443594	4.60	24.87	5.36	1.00	0.00	10	235.13	Liver
8560	454083	AA676398	17.83	148.22	8.37	4.00	0.00	19	62.7	Pool
8563	204478	H58506	3.94	20.02	5.08	1.00	0.00	4	443.86	Pool
8564	810457	AA457137	8.39	58.93	10.64	0.00	1.00	11	237.77	Adipose
8568	853368	AA663310	50.44	263.41	5.62	0.00	0.00	8	510.24	Eye
8573	325544	AA284265	81.88	513.16	6.27	1.00	0.00	3	410.83	Forebrain
8576	754034	AA479058	22.60	235.44	10.42	0.00	0.00	10	442.78	Pool
8582	806595	AA458480	16.39	148.75	9.13	2.00	0.00	18	13.7	Spleen
8584	345553	W73889	16.43	129.72	7.92	2.00	0.00	X	245.06	Pool
8588	430735	AA010223	6.40	60.32	9.43	2.00	0.00	3	143.02	Pool
8591	428407	AA004525	28.67	227.20	7.07	0.00	1.00	1	553.7	Placenta
8596	234955	H73828	48.67	495.61	10.18	3.00	0.00	10	235.13	Liver
8596	234955	H73828	48.67	495.61	10.18	3.00	0.00	4	443.86	Pool
8602	134997	R31793	6.65	43.28	6.51	3.00	0.00	11	237.77	Adipose
8604	128320	R12678	13.13	89.28	6.80	1.00	0.00	4	443.86	Pool
8605	325169	AA284261	7.08	48.78	6.85	2.00	0.00	11	237.77	Adipose
8606	324220	AA284184	295.30	3165.68	10.69	2.00	0.00	11	237.77	Adipose
8610	252491	H87459	6.66	118.24	17.74	2.00	0.00	11	237.77	Adipose

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8613	480023	AA114866	8.14	54.87	6.74	0.00	1.00	10	165.83	Aorta	Kidney	Forebrain
8615	365517	AA009593	109.91	1055.36	9.60	0.00	0.00	14	276.5	Cervix	Adiposa	Thymus
8624	657186	AA664040	78.37	1511.86	19.05	0.00	1.00	8	103.36		Lung	Brain
8625	259666	N32832	47.84	282.39	5.90	2.00	2.00				Kidney	Pool
8627	324946	AA264281	73.80	890.33	9.35	2.00	0.00				Placenta	Colon
8628	233277	H77494	35.54	334.54	9.41	3.00	3.00	1	102.62	Pooled	Whole embryo	Colon
8630	610446	AA457115	17.02	123.40	0.93	2.00	0.00			Muscle	Placenta	Pool
8631	430186	AA010188	3.28	53.80	16.41	4.00	0.00	X	231.75	Cervix	Pool	LID not found
8632	544440	AA677306	5.90	46.40	7.87	0.00	1.00	19	250.8	Germ Cell	Pool	LID not found
8633	110903	T80448	97.42	587.97	6.04	2.00	0.00	20	251.44	Gall bladder	Aorta	CNS
8635	820023	H98683	109.20	1285.23	11.77	2.00	1.00	5	501.96	Pool	LID not found	Other
8636	289060	N63598	38.43	267.24	6.78	0.00	2.00					
8639	430320	AA010408	30.28	330.73	10.92	4.00	0.00					
8645	460364	AA700419	6.79	46.75	5.32	1.00	1.00			Blood	CNS	Heart
8654	433111	AA680407	13.60	91.23	6.71	1.00	0.00			Adrenal gland	Blood	Tonsil
8655	731433	AA412217	17.38	106.73	6.15	0.00	1.00			Liver	Ovary	Pool
8656	85804	T72068	7.62	39.98	5.24	1.00	0.00			Larynx	Breast	Pancreas
8658	770368	AA430665	5.21	182.53	35.06	22.00	1.00	7	424.99	Liver	LID not found	Spleen
8675	212188	H98448	39.11	222.54	6.69	1.00	1.00	17	414.59	Brain	Thyroid	Adrenal gland
8678	39843	H93827	7.40	45.85	6.20	1.00	0.00			Brain	Thyroid	Adrenal gland
8681	178925	HA9511	2.67	90.53	33.88	2.00	0.00	11	412.13	Brain	Forebrain	Cervix
8683	856454	AA630794	115.39	690.52	5.98	0.00	2.00			Pancreas	Adrenal gland	Placenta
8684	68816	T53431	11.34	153.67	13.55	5.00	0.00					
8688	84695	T74566	14.15	75.79	5.35	1.00	0.00	9	400.09	Head and nec	Parathyroid	Placenta
8699	454872	AA877185	22.04	160.52	7.28	5.00	0.00	10	336.4	Smooth muscle	Forebrain	Skin
8708	725977	AA292226	50.62	1877.11	37.08	9.00	0.00	X	351.05	Head and nec	Cervix	Adipose
8710	197520	H32110	26.13	168.15	6.44	1.00	0.00	20	267.89	Spleen	Testis	LID not found
8713	659807	AA686527	79.02	778.76	9.86	0.00	3.00					
8717	884690	AA830016	3.72	19.18	5.17	0.00	1.00	21	144.63			
8720	52186	H24352	2.22	59.44	26.81	0.00	1.00	4	498.15	Brain	LID not found	Other
8727	34400	R41353	16.40	120.24	7.33	3.00	0.00	6	114.88	Eye	Tonsil	
8731	793321	AA454175	23.52	140.36	5.50	1.00	0.00	19	21.55	Cervix	Synovial mem	Bone
8743	843046	AA486413	11.07	63.20	5.71	1.00	0.00	17	368.42	Eye	Brain	Pool
8745	49275	H16701	3.65	23.12	6.33	0.00	0.00	20	300.46			
8747	487165	AA045074	11.52	64.17	5.57	2.00	0.00	10	554	Brain	Whole embryo	Blood
8750	897427	AA489470	10.87	66.03	6.19	2.00	0.00	2	652.25	Brain	LID not found	Other
8753	50613	H17511	1.96	17.07	8.71	3.00	0.00	20	210.44	Kidney	Brain	LID not found
8757	46471	H09778	153.24	852.89	6.22	1.00	1.00			Brain	LID not found	Other
8765	52191	H24355	11.70	70.99	6.03	3.00	0.00	2	97.57	Placenta	Eye	Umbilical cord
8766	625623	AA186605	21.84	148.78	6.81	0.00	1.00	4	45.08			
8769	47225	H11270	22.08	228.61	10.35	4.00	5.00	3	678.04	Brain	Placenta	Pool
8773	46807	H10204	2.46	16.77	6.81	1.00	0.00	4	422.79	Brain	CNS	Parathyroid
8776	50593	H17625	160.22	1147.64	7.16	2.00	5.00	19	88.74	Gall bladder	Brain	Adrenal gland
8779	291618	N67816	155.92	926.81	5.94	1.00	0.00			Muscle	LID not found	Other
8786	859422	AA686180	334.56	2292.62	8.85	1.00	3.00			Pool	Whole embryo	Germ Cell
8790	416711	V985608	7.44	37.62	5.06	0.00	1.00			CNS	LID not found	Other
8791	796337	AA456138	4.11	42.44	10.32	2.00	0.00			Brain	Whole embryo	Germ Cell
8792	51542	H20757	341.33	3069.48	8.00	3.00	0.00	1	102.83	Cervix	Thyroid	
8794	841070	AA468761	93.93	879.52	9.36	0.00	1.00			Spleen	LID not found	Other
8796	72063	T52375	42.52	392.08	9.22	1.00	3.00			Ear	Adipose	CNS
8797	49240	H15436	21.21	121.09	6.71	1.00	0.00	X	350.62	Brain	LID not found	Other
8800	51485	H24018	2.09	12.35	5.92	1.00	0.00	3	628.88	Ear	Parathyroid	Germ Cell
8809	47149	H10593	56.88	302.36	5.31	0.00	2.00			Spleen	LID not found	Other
8812	73756	T54643	13.42	136.78	10.19	3.00	0.00	5	631.78	Brain	Pool	LID not found
8817	46197	H09245	2.84	18.93	7.03	1.00	3.00					

Table 2A

8818	80338	765736	47.55	345.81	7.26	1.00	0.00	1	545.68	Thymus	Spleen	Adipose
8819	810239	AA464708	53.40	442.34	8.28	2.00	2.00	15	227.19	CNS	Ovary	Prostate
8820	73787	T54673	92.77	901.06	8.71	3.00	3.00	12	205.02	Spleen	LID not found	Whole embryo
8822	133454	R27457	59.50	389.64	8.55	0.00	1.00	15	215.11	Spleen	Whole embryo	Prostate
8823	1032048	AA610040	83.15	790.01	8.49	2.00	0.00	15	215.11	CNS	Whole embryo	Prostate
8824	52817	H18231	103.04	1022.27	8.60	3.00	2.00	15	215.11	CNS	Whole embryo	Prostate
8829	50506	H17506	88.19	1092.05	12.38	2.00	0.00	15	215.11	CNS	Whole embryo	Prostate
8842	416447	H080361	36.08	244.91	6.78	3.00	1.00	15	215.11	CNS	Whole embryo	Prostate
8844	276920	N39449	12.98	79.23	6.11	1.00	0.00	15	215.11	CNS	Whole embryo	Prostate
8845	347772	V081603	28.40	187.51	6.60	1.00	1.00	15	215.11	CNS	Whole embryo	Prostate
8864	429011	AA004719	66.75	354.07	5.30	1.00	0.00	16	113.68	Pool	LID not found	Other
8871	415229	V081879	4.29	180.46	42.05	9.00	2.00	1	334.46	Kidney	Colon	Pool
8875	810459	AA457135	9.49	113.26	11.84	2.00	1.00	10	188.88	Pool	Kidney	Eye
8879	203888	H56640	24.70	153.94	6.23	1.00	0.00	11	254.48	Pool	Brain	LID not found
8883	240509	H00767	85.64	498.68	5.83	3.00	0.00	2	647.14	CNS	Liver	Eye
8890	239465	N71080	109.26	121.21	5.15	1.00	0.00	16	10.95	Prostate	LID not found	Other
8893	204596	H57060	2.21	12.32	5.57	1.00	0.00	5	455.9	Cervix	Pool	LID not found
8911	204651	H57130	3.26	51.45	15.78	3.00	0.00	8	438.5	Stomach	Breast	Heart
8915	345081	W74802	2.11	18.88	8.93	7.00	0.00	4	615.42	Stomach	Whole embryo	Lung
8938	809893	AA454881	146.42	1591.08	10.87	2.00	0.00	8	570.71	Eye	Brain	LID not found
8960	238608	N59270	10.72	67.63	6.31	1.00	0.00	5	482.78	Uterus	Testis	LID not found
8963	771128	AA429398	4.51	33.08	7.33	1.00	0.00	2	19.86	Uterus	Testis	LID not found
8984	361840	W02514	63.81	526.49	8.25	4.00	0.00	2	19.86	Uterus	Testis	LID not found
8985	488054	AA033296	20.73	115.22	5.56	2.00	0.00	9	137.28	Pool	Brain	LID not found
8987	193547	R09225	157.87	1020.30	6.46	2.00	0.00	X	591.02	Thyroid	Forebrain	Testis
8988	342008	W06037	42.21	307.87	7.29	1.00	0.00	7	307.36	Esophagus	Synovial mem	Prostate
8988	862469	AA678404	10.38	74.61	7.20	2.00	0.00	5	481.07	Cervix	Ear	Uterus
8993	415085	W05382	11.55	67.99	5.89	1.00	0.00	12	430.39	Epiphyse	Liver	Stomach
8998	782840	AA448271	36.34	234.14	6.44	2.00	0.00	4	436.32	Gall bladder	Muscle	Breast
9000	145112	R77293	141.83	816.52	5.75	0.00	0.00	11	117.56	Eye	Uterus	Testis
9001	771301	AA438337	4.45	77.86	7.46	0.00	0.00	X	289.73	Neural	Stomach	Adrenal gland
9003	156048	R72434	1.51	11.31	7.46	0.00	0.00	12	242.45	Muscle	CNS	LID not found
9005	795309	AA454160	4.85	93.46	19.26	2.00	0.00	1	553.7	Spleen	Brain	LID not found
9012	230082	R05982	2.82	21.57	7.65	1.00	0.00	5	13.56	Larynx	Blood	Brain
9013	488148	AA058711	4.89	32.59	6.68	1.00	0.00	12	45.2	Blood	Uterus	Pancreas
9014	809503	AA454582	7.23	887.41	95.10	10.00	0.00	1	165.69	Small intestine	Skin	Pancreas
9016	754406	AA436187	17.44	115.28	6.61	1.00	0.00	3	331.21	Pancreas	Forebrain	Brain
9023	429211	AA007263	141.05	948.35	8.72	4.00	0.00	1	674.5	Pool	Tonsil	Heart
9024	377671	AA055878	3.67	78.47	20.26	1.00	0.00	12	247.55	Neural	Cervix	Eye
9025	735881	AA496539	5.07	392.82	77.40	7.00	0.00	21	266.24	Esophagus	Liver	Pool
9028	51842	H24308	1.83	6.58	5.25	1.00	0.00	11	127.97	Skin	Aorta	Pool
9029	263950	H64014	51.45	351.95	6.84	0.00	1.00	1	553.7	Spleen	Brain	LID not found
9047	45587	H07934	16.31	81.63	5.00	1.00	0.00	5	13.56	Larynx	Blood	Brain
9053	40871	R58251	6.28	41.91	6.70	0.00	1.00	1	165.69	Small intestine	Skin	Pancreas
9054	46160	H08070	2.42	23.15	9.58	2.00	0.00	3	331.21	Pancreas	Forebrain	Brain
9059	51210	H18227	3.68	31.82	8.20	3.00	0.00	1	674.5	Pool	Tonsil	Heart
9060	48555	H15089	103.13	841.75	6.22	2.00	4.00	12	247.55	Neural	Cervix	Eye
9087	731308	AA418759	82.83	473.20	5.71	1.00	1.00	21	266.24	Esophagus	Liver	Pool
9070	768857	AA430367	28.28	280.51	10.67	1.00	0.00	1	576.82	Neural	Cervix	Eye
9071	45417	H08720	5.72	62.20	10.87	1.00	0.00	11	127.97	Skin	Aorta	Pool
9075	49410	H15665	60.75	718.01	8.89	1.00	3.00	11	127.97	Skin	Aorta	Pool

Table 2A

9081	745139	AA626698	602.88	5403.56	8.97	0.00	1.00	7	413.5	Stomach	Bone	Breast
9092	46108	H08325	34.81	308.50	8.84	4.00	4.00	3	488.64	Brain	LID not found	Other
9093	487429	AA046525	3.24	17.76	5.49	1.00	0.00	18	178.77	Placenta	Heart	Colon
9098	46105	H09322	3.35	28.07	7.70	3.00	1.00	8	515.78	Brain	Whole embryo	Placenta
9102	08950	T54121	9.43	103.84	11.01	3.00	0.00	5	482.73	Brain	LID not found	Other
9103	49639	H08730	3.50	49.89	14.27	2.00	0.00	11	289.09	Larynx	Heart	Liver
9104	32339	R42823	1.74	9.85	5.56	0.00	1.00	18	400.44	Skin	Pool	LID not found
9105	343867	VM8954	14.12	113.52	6.04	1.00	0.00	7	414.93	Brain	Umbilical cord	Fore skin
9108	52842	H28580	14.90	157.02	10.54	3.00	0.00	1	871.54	Pooled	LID not found	Other
9109	725395	AA292074	54.84	276.03	5.03	1.00	0.00	6	600.46	Tonsil	Fore skin	CNS
9110	624754	AA187148	6.56	37.76	5.75	1.00	0.00	7	262.43	Uterus	Liver	Ovary
9111	47397	H12081	3.02	23.77	7.87	0.00	1.00	4	71.55	Kidney	Placenta	Brain
9119	45849	H08568	21.59	268.89	12.38	2.00	5.00	18	393.85	Cervix	LID not found	Other
9137	795806	AA461174	3.28	88.39	30.20	1.00	0.00	17	48.77	Ovary	Umbilical cord	Cobon
9140	345032	W72293	28.45	586.24	19.81	8.00	0.00	9	137.48	Umbilical cord	Breast	-
9149	83853	T61116	42.65	285.33	0.24	0.00	1.00	10	553.28	CNS	Brain	Testis
9154	889044	AA538945	28.41	181.03	6.85	3.00	0.00	4	24.02	Pancreas	Lung	Prostate
9163	843185	AA488432	129.58	1692.17	13.06	3.00	0.00	1	728.88	Brain	LID not found	Other
9167	40885	R56234	140.05	959.79	6.85	2.00	2.00	8	300.98	Brain	CNS	Nose
9171	842848	AA485281	9.47	52.15	5.50	0.00	1.00	19	250.6	Parathyroid	LID not found	Other
9172	67735	T49633	213.17	1591.09	7.48	2.00	2.00	20	333.71	CNS	Kidney	Heart
9184	67237	T52700	26.12	328.15	12.56	4.00	3.00	12	428.87	Fore skin	Pool	Whole embryo
9188	34243	R44173	105.89	742.68	7.01	0.00	1.00	5	355.65	Ear	Parathyroid	Bone
9192	73953	T55167	93.70	492.08	5.25	0.00	1.00	6	201.54	Fore skin	LID not found	Other
9193	19660	T63520	30.46	168.49	5.53	0.00	1.00	11	255.2	Pooled	Spleen	Germ Cell
9196	34745	R44163	39.37	257.94	6.52	0.00	1.00	8	515.7	Breast	Heart	Ovary
9200	73252	T56013	22.25	146.60	6.59	1.00	1.00	3	423.24	Ovary	Umbilical cord	Kidney
9203	208945	N64817	22.25	146.60	6.59	1.00	1.00	19	71.09	Ovary	Brain	Testis
9205	32845	R43168	1.19	6.71	5.64	1.00	0.00	1	629.85	Ear	Cervix	Bone
9216	25843	R37026	37.74	322.45	8.54	2.00	2.00	1	674.22	Placenta	Pooled	Muscle
9223	368897	AA029597	3.61	83.72	23.16	6.00	1.00	13	123.82	Aorta	Fore skin	Whole embryo
9223	271483	N31808	0.81	6.92	8.54	1.00	0.00	21	180.34	Skin	Cervix	Bone
9248	272600	N35922	22.15	120.67	5.45	1.00	0.00	2	101.44	Thymus	Heart	Lung
9258	305877	N89973	11.77	93.57	7.95	2.00	0.00	1	183.73	Small intestine	Esophagus	Lymph node
9260	251769	H97668	7.09	152.51	21.50	0.00	0.00	11	389.93	Lymph	Synovial mem.	-
9267	610429	AA437108	22.19	193.03	8.70	1.00	0.00	5	416.73	Placenta	LID not found	Other
9276	269332	N75569	220.92	1408.06	6.37	2.00	0.00	1	41.87	Ear	CNS	-
9276	241330	H91245	15.24	139.16	9.13	4.00	5.00	12	400.35	-	-	-
9296	610987	AA465357	61.15	308.65	5.05	1.00	0.00					
9300	762452	AA431435	6.36	89.50	10.93	0.00	1.00					
9310	770954	AA428367	102.58	1037.80	10.12	2.00	0.00					
9312	375827	AA039851	1.52	16.16	10.65	4.00	0.00					
9313	271165	N34494	99.26	884.61	8.71	1.00	0.00					
9316	235104	H75319	57.34	320.54	5.59	2.00	0.00					
9322	323185	W42587	358.77	3986.32	11.12	2.00	0.00					
9335	844680	AA670107	7.04	203.64	28.94	3.00	0.00					
9340	243177	H84474	28.53	237.22	8.31	2.00	5.00					
9352	884425	AA029692	310.41	2311.00	7.45	0.00	1.00					
9353	143535	R75639	57.31	301.14	6.25	1.00	0.00					
9360	377590	AA055846	7.01	38.60	5.51	1.00	0.00					
9361	430233	AA010222	7.40	39.06	5.28	0.00	1.00					
9364	342892	W74337	6.10	34.76	5.70	0.00	1.00					
9365	430092	AA008840	14.40	92.22	6.41	1.00	0.00					
9368	435350	AA889228	6.31	32.80	5.20	1.00	0.00					

Table 2A

9369	252278	H87153	66.35	491.18	7.40	3.00	0.00	16	-13.12	Head and neck
9374	770516	AA434187	42.92	263.01	6.13	1.00	0.00	7	424.26	Peripheral ner
9375	375982	AA032221	21.05	124.44	5.91	0.00	1.00		Bone	Pooled
9376	525020	AA074511	19.03	118.33	6.22	1.00	0.00	2	71.28	Larynx
9377	271926	N32560	414.27	3017.05	7.28	2.00	0.00	2	118.93	Muscle
9385	272858	N32281	280.86	1599.25	5.70	2.00	0.00	15	227.19	
9386	415089	W93379	18.03	98.16	5.33	1.00	0.00	1	685.02	Pooled
9386	415089	W93379	18.03	98.16	5.33	1.00	0.00	1	419.03	Tonsil
9391	502561	AA157017	49.32	295.07	5.98	2.00	1.00	3	56.78	Uterus
9391	502561	AA157017	49.32	295.07	5.98	2.00	1.00	3	56.78	Uterus
9393	201608	R98003	117.56	1009.81	8.59	2.00	2.00	17	452.42	Pool
9396	230013	N83768	0.58	10.04	17.18	1.00	0.00		LID not found	Other
9407	811142	AA485731	60.45	487.58	6.08	2.00	0.00		Spleen	Lung
9411	491727	AA150487	473.01	3242.42	6.85	1.00	1.00	2	720.63	Pituitary
9414	153541	R48320	4.62	37.85	8.21	0.00	1.00	X	117.87	Brain
9415	34405	R44357	13.06	69.07	5.20	1.00	0.00		Colon	Parathyroid
9416	23903	R39520	5.54	28.93	5.40	1.00	0.00	7	675.52	Synovial mem
9421	811048	AA485427	18.58	145.66	8.78	7.00	0.00	14	278.45	Esophagus
9423	1034778	AA671535	11.79	60.40	5.12	1.00	0.00		Stomach	Spleen
9424	40881	R96055	5.37	52.66	9.81	1.00	0.00	11	36.84	Brain
9425	377892	AA035013	42.85	533.24	12.45	1.00	0.00	12	47.55	Breast
9436	73436	T55407	77.49	580.29	7.23	0.00	3.00		Umbilical cord	Spleen
9439	47783	H11938	5.83	33.84	5.77	0.00	1.00	17	345.1	Neural
9456	22788	R38635	43.37	258.70	5.96	0.00	2.00		Thymus	Eye
9457	854284	AA688728	4.70	26.77	5.70	1.00	0.00	12	236.8	Parathyroid
9460	73608	T65704	16.33	98.68	6.11	0.00	1.00		Skin	Spleen
9461	344243	W69906	28.76	172.26	6.44	0.00	1.00	1	597.27	Smooth musc
9464	33028	R44098	4.97	51.68	10.35	0.00	1.00	11	65.6	Heart
9470	1031076	AA610066	17.18	132.19	7.69	2.00	0.00	6	504.31	Brain
9472	41843	R52892	30.49	303.67	9.08	3.00	5.00	X	276.32	CNS
9478	73241	T55007	1.61	10.24	6.37	1.00	0.00	6	117.99	Smooth musc
9478	868332	AA634028	53.64	1075.17	19.97	9.00	0.00	6	542.05	Brain
9480	23114	R36552	43.58	381.56	6.78	2.00	5.00	5	672.03	Pooled
9483	241489	H90431	6.65	111.01	16.68	0.00	2.00	14	139.45	Brain
9487	33078	R44048	33.35	239.68	7.19	1.00	1.00	5	454.26	Brain
9488	51395	H19415	24.31	422.45	17.38	5.00	5.00	12	58.23	Pool
9493	415068	W93370	7.09	82.56	11.64	3.00	3.00		LID not found	Other
9497	433481	AA695573	2.85	68.93	31.50	4.00	2.00	17	89.67	Colon
9499	377252	AA055350	18.49	222.83	13.51	0.00	1.00	16	182.99	Parathyroid
9501	281580	H98894	5.61	83.37	14.85	0.00	2.00	14	278.24	
9502	253009	H88540	311.21	4461.25	14.34	7.00	1.00	9	355.78	Brain
9508	50018	H16761	87.14	525.64	6.03	2.00	1.00	1	740.99	Adipose
9512	898078	AA598781	50.55	444.59	8.60	0.00	1.00	15	166.46	Synovial mem
9513	45845	H08753	181.35	1279.28	7.05	1.00	0.00		Thyroid	Lymph
9514	511081	AA088258	56.55	858.15	15.14	3.00	0.00		Brain	LID not found
9515	32186	R42671	30.23	192.99	6.38	0.00	3.00		Spleen	Tonsil
9531	71825	T52531	34.64	208.27	6.01	1.00	0.00	2	694.44	
9537	49844	H29215	50.41	278.75	5.45	0.00	1.00	14	55.7	Stomach
9538	275237	R94175	15.97	95.23	5.96	0.00	2.00	19	290.72	Tonsil
9539	50863	H18428	58.66	337.10	5.75	0.00	1.00		Lung	LID not found
9540	80699	T57848	9.37	50.30	5.37	1.00	0.00	17	347.4	Small intestine
9544	730633	AA412738	32.78	171.68	5.24	1.00	0.00	20	182.55	CNS
9552	897595	AA496087	9.31	61.69	6.63	1.00	0.00	9	32.97	Spleen
9553	47186	H10403	3.85	40.69	6.96	0.00	1.00		Whole embryo	Brain
9555	511096	AA084558	24.54	155.29	6.33	0.00	3.00	9	419.74	Bone
9556	68560	T58648	134.08	1459.02	10.89	2.00	4.00		Pituitary	LID not found

Table 2A

9573	49631	H32957	196.31	1278.87	6.51	3.00	2.00	105.23	Whole embryo/Brain	Tonsil
9575	249755	H45476	88.89	455.14	6.12	1.00	0.00		Muscle	Pancreas
9578	530237	AA111979	19.89	101.13	5.06	1.00	0.00		Pool	LID not found Other
9579	425444	AA04868	38.91	211.86	5.44	0.00	2.00	478.93	Ovary	Whole embryo
9582	593537	AA165410	8.71	110.08	19.20	0.00	1.00		Pool	LID not found Other
9587	429333	AA007502	27.40	174.36	6.34	2.00	2.00	362.75	Colon	
9591	587308	AA130351	126.23	779.20	6.03	2.00	0.00	32.33	Brain	LID not found Other
9597	46506	H09143	11.39	120.19	10.55	4.00	2.00		Lymph	LID not found
9599	340689	W79534	1.97	18.22	9.74	1.00	1.00		Pool	LID not found Other
9599	416095	W85690	63.68	532.08	8.33	3.00	2.00	339.45	Aorta	Pool
9607	204442	H58000	17.82	101.92	5.72	4.00	0.00	359.28	CNS	LID not found
9608	248232	H58473	153.16	1000.45	6.53	3.00	0.00		Pool	LID not found
9612	263268	N45301	9.75	57.28	5.87	0.00	1.00	674.22	Parathyroid	Prostate
9615	428529	AA004846	3.43	17.42	5.09	1.00	0.00	57.88	CNS	Colon
9616	244305	N54783	4.23	23.65	5.59	1.00	0.00	90.09	Pool	Uterus
9630	359135	AA010128	10.84	75.56	8.97	0.00	1.00	-9.21	Brain	Heart
9648	499220	AA036734	4.36	32.29	7.41	2.00	0.00	474.54	Parathyroid	Heart
9651	384352	AA022498	4.13	35.98	8.70	1.00	0.00	274.11	Germ Cell	Prostate
9654	357288	W63656	10.22	61.46	6.02	1.00	0.00	104.03	Lymph node	Synovial men Cervix
9655	263919	N50787	27.04	152.73	6.02	2.00	0.00	193.24	Pool	LID not found Other
9659	191868	H40351	1.36	8.01	5.89	1.00	0.00		CNS	Kidney
9660	271747	N46056	4.19	96.43	23.02	2.00	0.00		Pool	Pool
9668	279164	N46321	44.10	336.03	7.62	1.00	0.00		Ear	Umbilical cord Tonsil
9672	247381	N58022	2.74	13.89	5.08	1.00	0.00	269.05	Uterus	Placenta
9682	124895	R05123	25.73	179.55	6.98	3.00	0.00	88.07	Prostate	LID not found
9686	294281	N64428	2.54	18.84	5.54	1.00	0.00		Pool	Breast
9690	126449	R05705	5.86	31.28	5.34	1.00	0.00	115.45	Bone	Testis
9691	782688	AA447593	23.28	162.18	6.42	1.00	0.00	19.85	CNS	Eye
9694	283995	N53378	9.86	44.55	5.03	1.00	0.00	487.02	Pool	LID not found Other
9695	207828	H60560	8.24	37.40	6.00	2.00	0.00		Skin	Pooled CNS
9696	489169	AA055580	18.08	105.60	5.54	0.00	1.00	46.84	Thyroid	Heart
9700	205239	H60824	4.17	27.32	8.56	3.00	0.00		Lymph	Eye
9701	303180	N52764	5.00	35.21	5.87	1.00	0.00	181.88	Muscle	Breast
9708	755301	AA496350	5.63	33.79	6.00	3.00	0.00	469.78	Ovary	Blood
9711	282223	N62464	96.86	533.08	5.50	1.00	0.00	105.9	Fore skin	Pool
9712	22985	R38640	3.92	172.21	43.91	3.00	0.00	568.94	Brain	LID not found
9714	427750	AA001887	2.81	14.52	5.57	1.00	0.00		Bone	LID not found
9716	120929	T06107	4.41	29.74	8.74	1.00	0.00		Pool	LID not found
9716	434133	AA703141	6.24	151.91	24.34	0.00	5.00	40.87	Germ Cell	CNS
9724	280970	N50854	21.51	144.48	6.72	1.00	2.00	18.42	Head and nec	Esophagus
9728	298448	N74623	16.41	2386.92	145.45	3.00	0.00	561.51	Head and nec	Esophagus
9733	399009	W92134	1.85	21.18	11.44	5.00	0.00		Eye	Pancreas
9737	795315	AA454172	96.40	574.13	5.96	2.00	0.00	165.59	Pool	Testis
9760	795364	AA459874	5.70	28.53	5.06	1.00	0.00		Thyroid	Pool
9753	428338	AA05153	5.39	48.88	9.07	7.00	0.00		Pool	LID not found
9758	785314	AA480008	1.08	9.91	9.34	1.00	0.00	22.34	Testis	Brain
9759	212347	H68286	26.95	237.69	8.82	1.00	0.00		Pool	LID not found
9761	428632	AA004529	43.79	246.10	5.82	2.00	0.00	223.96	Lung	Synovial membrane
9767	243668	N39542	24.68	125.89	5.12	1.00	0.00		Pool	LID not found
9776	376657	AA037810	8.39	45.30	5.40	0.00	1.00		Lung	Uterus
9781	504331	AA151245	1.50	20.77	13.83	2.00	0.00	18.88	Nose	Adipose
9784	755599	AA419251	64.16	1420.22	22.14	7.00	0.00	228.96	Ovary	LID not found
9787	810700	AA457688	25.28	141.81	6.80	2.00	0.00	227.81	Esophagus	Stomach
9788	155768	R72097	1.88	32.54	17.33	5.00	0.00		Neural	Ovary
9789	755274	AA454012	4.28	24.40	5.70	1.00	0.00			

Table 2A

9790	810205	AA464518	3.45	61.13	17.72	1.00	0.00	8	404.08	Blood	Heart	Ovary
9792	289486	N63988	10.03	428.49	42.72	3.00	0.00	10	421.81	Smooth musc	Stomach	CNS
9804	51508	H11853	42.30	284.50	6.73	0.00	4.00			Brain	Pool	LID not found
9805	590774	AA157469	1.42	7.33	5.16	1.00	0.00			Parathyroid	Pancreas	Prostate
9809	773476	AA427891	19.92	106.31	5.34	1.00	0.00	3	726.84	Tonsil	Blood	Whole embryo
9813	270917	N325114	0.63	16.96	26.81	1.00	0.00	8	165.67	Synovial mem	Neural	Heart
9818	364934	AA025275	33.89	219.53	6.48	1.00	0.00	10	396.69	CNS	Pituitary	Parathyroid
9820	51218	H16472	6.64	49.69	5.75	1.00	1.00	10	363.47	Marrow	Ovary	Pituitary
9824	13178	H11036	13.72	97.07	7.07	1.00	2.00	8	434.49	Brain	Whole embryo	Kidney
9828	33837	R45939	12.69	101.37	7.99	1.00	0.00	4	438.11	Brain	Adrenal gland	Lung
9830	713674	AA284854	12.28	62.28	5.07	1.00	0.00	5	578.76			
9831	52577	H29566	161.57	1246.09	7.71	3.00	5.00	9	358.01			
9832	52577	R43352	3.61	56.95	9.80	0.00	2.00	11	131.57	CNS	Brain	Pool
9837	731047	AA464652	26.06	135.05	5.18	0.00	1.00			Adrenal gland	Testis	Germ Cell
9844	22800	T87235	1.33	14.81	10.88	2.00	0.00	12	80.95	Brain	LID not found	Other
9847	52730	H29500	3.23	21.10	6.54	0.00	1.00	3	472.27	Brain	Blood	Prostate
9849	868630	AA664389	256.71	1369.46	5.33	1.00	0.00	13	131.31	Stomach	Head and nec	Ear
9855	50250	H17500	5.59	32.83	5.89	2.00	0.00	3	697.57	Brain	LID not found	Other
9856	51868	H16938	2.37	30.59	12.90	2.00	2.00	13	155.48	Pancreas	Lung	Brain
9860	34360	R44793	2.61	19.31	7.39	1.00	0.00	13	147.98	Whole embryo	Pancreas	CNS
9861	303109	N90783	12.95	96.96	7.49	1.00	0.00	1	611.54	Cell bladder	Pool	Pituitary
9862	433155	AA880136	4.11	23.01	7.08	1.00	0.00	1	740.99	Esophagus	Adrenal gland	Aorta
9864	32486	R43486	4.01	23.80	7.17	2.00	0.00			Testis	Pool	Brain
9865	287745	N62244	21.29	162.61	7.65	2.00	0.00	1				
9870	433651	AA700556	23.79	140.65	5.45	0.00	1.00					
9871	50132	H17055	2.68	15.79	5.90	1.00	0.00	13	204.51	Brain	LID not found	Other
9872	49554	H15087	4.37	23.62	5.40	1.00	0.00	2	97.87	Brain	Pool	LID not found
9875	51774	H23212	14.01	115.07	7.72	2.00	0.00	5	-9.1	Forelimb	Brain	Whole embryo
9876	24915	R39066	3.48	24.72	7.10	1.00	0.00	12	244.17	Skin	Cervix	Germ Cell
9881	261738	H91691	35.14	224.01	6.37	0.00	1.00	1	538.57	Eye	CNS	Lymph
9884	72003	T52330	1.99	14.07	7.07	3.00	0.00	11	238.57	Brain	LID not found	Other
9885	568725	AA179171	9.62	48.18	5.01	1.00	0.00	18	328.18	Brain	Forelimb	Brain
9886	40549	R56397	1.75	10.41	5.93	1.00	0.00	7	485.65	Neural	Forelimb	Brain
9892	33510	R43898	2.58	16.23	6.28	2.00	0.00	6	21.28	Umbilical cord	Muscle	Uterus
9895	951125	AA620558	115.42	950.64	8.24	0.00	1.00			Liver	Uterus	LID not found
9904	83158	T68113	243.52	1425.87	5.66	0.00	3.00	11	97.53	CNS	Brain	LID not found
9906	45500	H08203	1.86	49.69	26.79	0.00	1.00	2	675.88	Germ Cell	Lung	
9913	23566	T08369	8.07	73.87	0.16	1.00	3.00	2	228.05	Brain	Whole embryo	Lung
9921	31818	R41730	24.68	136.75	5.54	1.00	0.00	5	654.42	Smooth musc	Testis	Tonsil
9923	743724	AA400229	13.12	71.96	5.48	1.00	0.00	5	584.18	Larynx	Brain	Parathyroid
9925	47234	H10939	2.22	47.37	21.35	3.00	1.00	9	383.2	Neural	Synovial mem	Blood
9929	796078	AA460353	0.64	8.76	11.69	1.00	0.00			Lymph node	Forelimb	Bone
9935	950888	AA605687	202.83	1140.65	5.62	1.00	0.00			Brain	LID not found	Other
9956	26259	R20647	4.57	55.33	12.10	2.00	0.00	16	194.85	Lymph node	Synovial mem	Aorta
9957	31496	H18927	2.25	16.68	8.31	2.00	0.00			CNS	Brain	
9958	346971	W74648	5.54	30.82	5.56	1.00	0.00					
9960	25384	R12808	50.97	391.93	7.89	3.00	0.00	13	120.56	Thymus	Ear	Adrenal gland
9966	262720	N50078	55.00	298.40	5.43	0.00	1.00	1	638.63	Adipose	CNS	Muscle
9970	841226	AA467115	46.82	270.05	5.79	1.00	0.00	8	91.28	Forelimb	Whole embryo	Germ Cell
9973	46591	H09757	13.82	197.05	14.30	1.00	0.00	8	442.4	Synovial mem	Skin	Canx
9974	946988	AA600214	179.13	1782.73	9.96	1.00	0.00	17	332.34	Skin	Brain	LID not found
9980	32583	R43543	3.31	22.66	6.85	0.00	1.00	5	39.72	Germ Cell	Testis	Eye
9981	50879	H18424	6.40	52.52	8.21	1.00	0.00	18	-10.88	Smooth musc	CNS	Placenta
9988	765446	AA453616	1.45	25.38	10.81	5.00	0.00					
9991	284100	N53421	6.62	112.66	17.06	1.00	2.00					

Table 2A

9996	320201	W15542	105.30	672.71	6.39	2.00	0.00	1	98.46	Parathyroid	Eye	Prostate
10003	810454	AA457119	39.05	293.61	7.52	4.00	0.00	21	217.43	Larynx	Cervix	Skin
10014	120229	R02229	5.72	54.41	9.52	2.00	0.00			LID not found	Other	
10019	303049	N91589	4.53	26.35	6.82	1.00	0.00	16	22.69	Colon	Breast	Lung
10020	270277	N33555	47.06	278.16	5.93	1.00	0.00	3	141.89	Forebrain	LID not found	Other
10022	411806	W64774	3.40	17.48	5.15	1.00	0.00	X	287.83	Pool	Colon	LID not found
10037	503725	AA131530	160.27	1134.39	7.08	2.00	0.00	X	296.2	CNS	Bone	Breast
10039	120678	T95650	51.78	448.02	8.67	2.00	2.00	3	198.24	Breast	Brain	Pool
10034	308216	N92404	13.53	114.47	8.46	3.00	3.00	4	420.51	Whole embryo	Pool	Heart
10038	425289	AA007370	9.85	97.80	9.53	1.00	0.00	19	218.02	Stomach	CNS	Heart
10042	113193	T83364	49.05	282.84	5.77	2.00	2.00			CNS	Placenta	Pool
10047	277714	N49577	2.25	14.52	8.46	1.00	0.00	4	579.1	Colon	Heart	Uterus
10048	343387	W67292	4.07	23.21	5.71	1.00	0.00	8	404	Bone	Forebrain	Parathyroid
10052	321800	W37447	16.58	141.89	8.56	3.00	0.00	10	126.87	Pool	LID not found	Other
10058	429108	AA004796	4.59	27.01	5.95	1.00	0.00	10	45.1	Forebrain	Testis	Pool
10060	272677	N36172	5.59	36.72	6.92	1.00	0.00	10		Forebrain	Colon	Pool
10084	298250	N28714	20.84	122.51	5.85	1.00	0.00	22	119.23			
10078	120924	T95609	141.55	1082.71	7.85	3.00	0.00			Prostate	Heart	
10081	327337	W02102	39.81	230.38	5.77	0.00	1.00	1	578.51	Ear	Brain	Eye
10084	345743	W72656	20.15	178.23	6.85	5.00	0.00	21	154.34	Neural	Forebrain	Kidney
10089	261163	H98201	286.70	1632.70	5.65	1.00	0.00	3	164.31	Adipose	Colon	Heart
10093	371363	AA055052	2.55	19.63	7.71	2.00	0.00	20	270.8	Endodermis	Neural	Pancreas
10096	656796	AA085545	20.31	122.45	6.03	1.00	0.00	14	14.91	CNS	Forebrain	Whole embryo
10099	277042	N35572	4.73	47.81	10.10	4.00	0.00			Forebrain	LID not found	Other
10105	273652	N35994	108.68	852.50	6.00	1.00	2.00	3	89.88	Thymus	Eye	CNS
10112	384510	AA022561	38.68	348.61	9.51	0.00	5.00	8	116.81	Forebrain	Brain	Eye
10113	201417	N72307	213.91	1365.82	6.39	2.00	0.00			CNS	Eye	Breast
10115	288748	N62487	9.73	95.69	9.93	1.00	0.00				Heart	LID not found
10117	342208	W63785	33.69	204.61	6.04	0.00	3.00					
10120	433350	AA700604	34.17	200.17	5.86	1.00	1.00	2	120.34		Pool	LID not found
10124	257248	N26906	8.42	92.76	11.01	1.00	0.00	16	354.33	Placenta	LID not found	Other
10128	138140	R62384	3.38	27.21	8.05	1.00	0.00	5	289.88	CNS	LID not found	Other
10129	280387	N48276	11.39	75.96	6.67	0.00	4.00	3	52.66	Brain	LID not found	Other
10136	177667	H46254	4.23	21.50	5.08	1.00	0.00	7	284.9	Skin	Liver	Breast
10139	279081	N46240	31.92	168.48	5.22	0.00	1.00			Ear	Liver	Pool
10140	416539	W68423	102.91	639.40	8.21	2.00	0.00			Tonsil	Breast	Germ Cell
10143	504623	AA149225	14.33	83.93	6.70	1.00	0.00	2	140.92	Forebrain	Aorta	Umbilical cord
10144	53092	R15765	45.48	300.24	8.58	0.00	1.00			Heart	LID not found	Other
10149	365575	AA009484	1.20	23.42	18.22	3.00	0.00			Heart	Kidney	Pancreas
10157	376080	AA040387	6.21	39.11	6.29	1.00	0.00			Forebrain	Eye	Heart
10162	272327	N32199	180.45	1854.38	10.28	2.00	0.00	1	210.4	Heart	Aorta	Whole embryo
10165	345051	W72603	13.67	84.70	6.20	0.00	1.00	19	250.87	Uterus	Bone	Whole embryo
10166	503086	AA151480	9.10	48.85	5.37	1.00	0.00			Ovary	Lung	Brain
10167	809674	AA454589	79.24	704.02	8.89	3.00	0.00			Heart	Whole embryo	Lung
10173	377166	AA056163	4.11	21.66	5.32	1.00	0.00	8	323.97	Ear	Tonsil	Brain
10174	758298	AA404337	8.66	43.97	5.08	1.00	0.00	17	41.12	Neural	Umbilical cord	Muscle
10177	531957	AA113881	10.03	58.80	5.85	1.00	0.00			Pancreas	Colon	Kidney
10181	121551	T97710	3.80	71.56	18.24	7.00	1.00	6	102		Brain	LID not found
10181	32632	R43088	8.27	47.33	7.55	0.00	3.00	2	575.38	Aorta	Brain	LID not found
10192	41793	R59200	3.00	32.46	10.81	1.00	0.00			Kidney	Pool	Brain
10195	303055	AA018320	6.62	36.12	6.51	0.00	1.00			Umbilical cord	Spleen	Forebrain
10188	80892	T57834	158.02	1113.27	7.14	1.00	3.00	6	650.09	Brain	LID not found	Other
10189	45196	H08243	382.68	1970.83	5.15	0.00	1.00	3	684.31	CNS	Spleen	Tonsil
10204	74713	T57349	11.63	106.89	9.20	1.00	0.00			Breast	Eye	Lung
10205	152453	R46202	22.18	149.69	6.75	0.00	2.00					

Table 2A

10207	73222	T57221	53.18	332.42	6.25	1.00	3.00	8	542.11	Spleen	Pool	LID not found
10210	120600	T95113	8.28	230.57	27.84	2.00	0.00	2	314.3	Uterus	Lymph	-
10216	32025	R43646	2.42	19.79	8.17	1.00	0.00	1	335.43	CNS	Brain	LID not found
10223	742635	AA400282	38.08	352.82	9.27	2.00	3.00	4	443.68	Testis	Colon	LID not found
10224	23216	R30089	3.59	21.50	5.08	2.00	0.00	4	621.98	Brain	Pool	-
10225	429448	AA007889	21.09	112.40	5.33	1.00	0.00	1	813.3	Adipose	Pool	LID not found
10232	48360	H09769	29.89	318.81	10.87	5.00	5.00	6	813.3	Thyroid	Brain	LID not found
10235	868304	AA634006	546.62	4715.07	8.63	1.00	0.00	10	421.71	Aorta	Small intestine	Bone
10240	41405	R56148	2.57	19.30	7.52	3.00	0.00	8	413.37	Brain	LID not found	Other
10246	505491	AA156461	62.10	325.37	5.24	0.00	1.00	21	245.27	Ignore	Small intestine	Neural
10248	23554	R38274	4.76	28.74	6.25	0.00	1.00	2	87.96	Tonsil	Eye	CNS
10253	121406	T96568	2.15	11.44	5.31	1.00	0.00	21	266.39	Ignore	Lymph	-
10261	884718	AA629558	64.78	737.72	11.38	0.00	1.00	4	24.02	Lymph	Colon	Aorta
10264	135095	R33031	283.58	2277.83	7.78	2.00	2.00	15	309.17	Thyroid	Adrenal gland	Colon
10264	40949	H10079	5.56	43.90	7.90	0.00	1.00	8	438.11	Brain	Eye	Breast
10268	437042	AA670280	30.83	217.12	7.04	0.00	1.00	8	368.23	CNS	Ear	Fore skin
10268	79240	T58129	7.85	57.09	7.46	3.00	0.00	1	51.33	Heart	Uterus	Lung
10269	306575	N94870	83.72	505.47	6.04	1.00	2.00	1	51.33	Heart	Lung	Uterus
10272	23728	R35555	50.72	586.34	11.76	0.00	2.00	3	998.41	Neural	Placenta	Colon
10275	376359	AA041300	9.55	51.42	5.32	0.00	1.00	11	43.25	Heart	LID not found	Other
10278	40352	R54787	47.70	558.85	11.87	1.00	4.00	2	473.05	Brain	LID not found	Other
10282	742038	AA402812	11.87	58.81	5.05	0.00	1.00	10	274.1	Ovary	Cervix	Adrenal gland
10286	509943	AA052960	36.44	281.87	7.73	2.00	1.00	X	354.25	Aorta	Stomach	-
10291	511806	AA088430	181.99	1094.79	8.76	0.00	2.00	3	127.47	Noise	Adrenal gland	Colon
10293	46438	H08684	29.38	228.19	7.70	1.00	4.00	3	127.47	Noise	Heart	Brain
10294	32483	R43456	8.48	32.89	5.04	1.00	0.00	10	143.76	Kidney	Testis	Brain
10297	40150	R53960	48.00	620.10	12.92	5.00	5.00	X	283.1	Brain	LID not found	Other
10302	22845	R43978	4.27	64.15	19.68	1.00	0.00	3	139.88	CNS	Aorta	-
10309	46236	H10681	80.09	645.84	8.08	6.00	4.00	3	139.88	CNS	Aorta	-
10312	650676	AA608555	5.84	69.52	12.32	3.00	0.00	20	248.29	Whole embryo	Small intestine	Whole embryo
10315	765084	AA191488	286.88	1684.87	7.44	0.00	4.00	5	281.57	Tonsil	Brain	Adrenal glands
10316	33063	R45284	3.98	23.58	6.43	1.00	1.00	6	384.33	Pancreas	Parathyroid	Pool
10317	47059	H11016	61.65	402.87	6.54	4.00	2.00	8	436.1	Testis	Lung	Fore skin
10319	840576	AA487886	10.42	54.16	5.20	0.00	1.00	5	38.19	Brain	LID not found	Other
10321	40038	R53446	3.63	119.66	32.94	8.00	4.00	11	245.99	Eye	LID not found	Other
10323	839579	AA488813	32.82	328.45	10.01	3.00	0.00	10	45.27	CNS	Blood	-
10324	41595	R59558	4.67	33.88	5.02	1.00	0.00	9	309.54	Pool	LID not found	Other
10328	428938	AA034059	88.53	343.88	6.68	1.00	2.00	9	309.54	Pool	LID not found	Other
10327	321761	V06416	208.05	1389.36	6.68	4.00	0.00	9	309.54	Pool	LID not found	Other
10329	41381	R56123	4.33	62.27	14.40	4.00	0.00	9	309.54	Pool	LID not found	Other
10340	23822	R39546	3.60	23.55	6.53	1.00	0.00	9	309.54	Pool	LID not found	Other
10342	345262	W72881	4.07	32.38	7.95	3.00	0.00	9	309.54	Pool	LID not found	Other
10344	76647	T50985	1.24	7.97	6.41	1.00	0.00	6	64.68	Germ Cell	Ovary	LID not found
10347	839870	AA489847	3.64	20.93	5.75	0.00	1.00	19	185.89	Brain	Fore skin	Eye
10348	23890	R34381	5.40	54.60	10.11	5.00	5.00	19	185.89	Brain	Whole embryo	Other
10351	781461	AA428573	14.71	89.28	6.07	0.00	3.00	21	217.43	Cervix	Ovary	Parathyroid
10355	809800	AA458473	30.61	237.42	7.75	0.00	2.00	5	511.07	CNS	Colon	Brain
10356	32092	RA42895	1.51	13.64	9.05	2.00	1.00	10	253.69	Brain	LID not found	Other
10361	41825	R54109	0.85	22.97	24.09	5.00	2.00	9	309.08	Synovial mem	Placenta	Fore skin
10362	131826	R23735	1.32	9.20	7.05	0.00	1.00	9	309.08	Eye	LID not found	Other
10363	839807	AA489768	196.76	1642.03	8.22	2.00	2.00	10	354.11	Brain	LID not found	Other
10364	24237	R38018	2.35	23.80	10.13	3.00	2.00	10	354.11	Brain	LID not found	Other
10366	322652	V15487	148.28	1014.81	6.84	1.00	0.00	10	354.11	Brain	LID not found	Other
10367	808557	AA454082	134.89	1265.39	9.42	1.00	0.00	10	354.11	Brain	LID not found	Other

Table 2A

10368	842678	AA468410	117.10	953.99	8.49	2.00	2.00	6	85.89	Cervix	Parathyroid	Bone
10370	126513	R06746	34.79	341.73	9.82	4.00	4.00			Lymph	Kidney	Pod
10374	728251	AA448285	28.21	230.95	8.81	3.00	0.00			Head and nec	Aorta	Cervix
10395	197374	R87122	46.08	235.75	5.12	1.00	0.00	15	282.02	Muscle	Heart	Stomach
10418	126739	R07128	11.78	117.38	9.98	2.00	0.00	18	62.23	Pool	LID not found	Other
10427	195801	R89104	73.91	449.48	6.08	2.00	0.00			Pool	LID not found	Other
10435	194689	R89626	5.58	41.33	7.40	3.00	0.00	1	628.23	Pooled	Placenta	Uterus
10438	130078	R21408	4.33	30.87	7.15	2.00	0.00			Forebrain	Gall bladder	Eye
10444	380155	AA013260	0.86	4.65	6.88	1.00	0.00			CNS	Heart	Testis
10446	380083	AA053815	6.16	37.03	6.01	1.00	0.00			CNS	Testis	LID not found
10448	280182	N62213	2.84	15.02	5.30	1.00	0.00			CNS	Pool	LID not found
10450	505506	AA146869	11.25	70.87	6.28	1.00	0.00	3	730.76	Uterus	LID not found	
10458	418323	W90764	29.44	202.03	6.86	1.00	0.00				Adrenal gland	Lymph
10460	289287	W90705	18.56	88.66	5.04	1.00	0.00	2	194	Thyroid	Placenta	Forebrain
10462	795376	AA453495	13.74	208.51	15.17	4.00	0.00			Germ Cell	LID not found	Other
10465	476492	AA005428	14.87	78.31	5.27	1.00	0.00	12	316.62	Pool	Pool	Eye
10467	234623	H77729	7.08	37.81	5.31	1.00	0.00	16	22.79	Blood	Pool	Eye
10468	811015	AA468377	6.43	82.30	9.77	2.00	0.00	14	199.9	Aorta	Thymus	
10471	321817	N91163	1163.06	10375.29	8.91	2.00	0.00			Liver	Lung	Pod
10472	742132	AA408020	21.64	246.82	11.40	8.00	0.00	8	440.23	Esophagus	Cervix	Germ Cell
10474	376462	AA039512	117.36	633.85	5.40	1.00	0.00			Thyroid	Blood	Tonsil
10476	39920	R53935	31.54	305.80	9.89	3.00	0.00			Pool	LID not found	Other
10480	297687	N59150	116.00	862.27	7.43	1.00	0.00	21	152.58	Bone	CNS	Whole embryo
10488	583815	AA157813	237.64	1553.70	6.54	4.00	0.00			Esophagus	Head and nec	Nose
10493	356041	AA074586	19.71	133.65	6.78	0.00	1.00	19	484.48	Cervix	Lymph	Forebrain
10496	755578	AA419177	60.74	878.41	11.17	7.00	0.00	8	581.65	Breast	Cervix	Ovary
10501	810039	AA468493	17.49	309.86	17.71	7.00	0.00			Blood	Eye	Whole embryo
10504	416899	W98199	20.79	143.51	6.90	0.00	1.00	4	487.3	Pool	LID not found	Other
10511	418328	W90760	34.54	192.82	5.58	0.00	2.00			Adipose	Ovary	Prostate
10512	344134	W73750	10.76	55.44	5.15	0.00	0.00	22	63.7	Blood	Aorta	CNS
10517	810230	AA464694	11.15	72.95	6.54	2.00	0.00			Brain	Pool	LID not found
10522	785561	AA458881	15.19	81.51	5.36	1.00	0.00	2	103.51	CNS	Uterus	Lung
10525	415715	W94657	3.57	17.87	5.01	1.00	0.00	8	289.56	CNS	Pool	Uterus
10530	502817	AA135628	63.53	724.53	8.67	2.00	0.00	4	444.77	Stomach	Parathyroid	Colon
10531	491844	AA150283	6.83	38.81	5.69	0.00	1.00			Parathyroid	Heart	Whole embryo
10533	489805	AA102068	2.28	37.27	16.35	2.00	0.00	10	403.21	Adrenal gland	Bone	Ear
10537	378043	AA040265	2.32	33.75	14.52	1.00	0.00	5	-10.43	Prostate	Testis	Pool
10542	321492	W92511	32.32	196.83	6.09	0.00	1.00	18	274.87	Ovary	Ovary	Pancreas
10543	229949	H70887	3.13	50.86	10.25	1.00	0.00	16	44.66	Pool	LID not found	Other
10545	430281	AA010600	3.66	31.42	8.54	3.00	0.00	11	163.74	Pool	Whole embryo	Umbilical cord
10548	810860	AA459401	8.17	580.56	68.80	13.00	1.00	10	335.81	Whole embryo	Muscle	Germ Cell
10550	489208	AA045658	15.91	117.86	7.41	0.00	1.00	19	250.4	Pooled	Spleen	Brain
10553	198311	R94491	26.39	187.78	6.38	2.00	0.00	7	137.5	Forebrain	CNS	Pool
10554	504628	AA150777	13.30	77.50	5.83	0.00	1.00	17	46.48	Cervix	Thymus	Pancreas
10557	782737	AA448003	2.98	15.25	5.11	1.00	0.00	20	206.92	Brain	LID not found	Other
10558	429060	AA005140	9.20	55.32	6.01	1.00	0.00	5	591.55	Umbilical cord	Germ Cell	Bone
10559	296488	N70206	3.43	450.59	131.56	22.00	1.00	11	57.07	CNS	Adrenal gland	Placenta
10562	884655	AA620009	138.10	1266.67	9.10	0.00	1.00	2	410.75	Brain	LID not found	Other
10565	531319	AA071488	12.10	147.97	12.23	0.00	1.00	15	257.33	Brain	LID not found	Other
10567	40573	R56044	8.18	60.13	7.35	1.00	2.00					
10571	48896	H09816	7.61	54.10	5.93	1.00	0.00					
10573	744047	AA629262	18.22	114.79	5.97	0.00	1.00					
10575	46173	H09099	13.28	1683.18	11.04	1.00	0.00					
10578	33408	R44082	87.32	604.24	6.92	0.00	2.00					
10583	47151	H10955	9.11	190.45	20.91	4.00	3.00					

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10584	46829	H10047	15.09	136.25	9.03	2.00	3.00	7	126.26	Brain	LID not found	Other
10587	46877	H05582	8.78	62.58	9.28	1.00	0.00	7	323.97	Brain	Kidney	Lung
10588	46867	H09859	6.28	39.97	6.37	1.00	1.00	11	259.81	Brain	Pool	LID not found
10603	46266	H08078	5.33	28.04	5.41	1.00	0.00	7	141.36	CNS	Brain	Uterus
10613	430966	A0678335	6.00	234.02	39.01	1.00	0.00	3	143.12	Pool	Testis	Prostate
10614	472008	A0036881	8.82	151.10	22.17	0.00	1.00	3	488.05	Lung	Lymph	Uterus
10616	50587	H17820	70.18	827.73	8.84	4.00	5.00	2	488.05	Brain	Testis	LID not found
10620	51981	H23229	74.03	710.43	9.80	3.00	0.00	2	426.08	Ovary	Blood	Prostate
10622	223150	H06354	3.16	372.02	117.56	21.00	2.00	8	130.67	Cell bladder	CNS	Germ Cell
10623	46273	H06082	8.47	68.95	7.90	2.00	1.00	1	468.83	Aorta	CNS	Brain
10628	878838	A0870450	15.43	112.35	7.28	1.00	0.00	7	228.15	Pancreas	Bone	Colon
10627	47788	H11728	2.73	20.43	7.47	2.00	0.00	21	21.38	Gall bladder	Liver	Kidney
10629	461727	AA082293	6.34	38.68	6.10	1.00	0.00	14	97.77	Brain	Pool	Whole embryo
10632	49277	H15408	6.73	65.74	9.76	2.00	0.00	2	471.33	Adrenal gland	Ovary	Brain
10635	25505	R20639	4.32	23.78	5.51	0.00	1.00	2	91.11	Spleen	Brain	LID not found
10637	759612	AA418229	11.86	186.01	15.69	0.00	0.00	3	601.67	Neural	Marrow	Pool
10639	50004	H16733	2.07	18.33	8.83	1.00	0.00	7	265.7	Gall bladder	Spleen	Muscle
10640	33716	R44078	17.44	119.78	8.87	0.00	2.00	1	194.06	Brain	Germ Cell	Eye
10641	894783	AA629603	0.73	70.39	96.44	1.00	0.00	20	259.04	Synovial mem	Eye	Lung
10642	45987	H28734	2.00	78.04	38.51	7.00	0.00	15	97.77	Brain	Pool	CNS
10644	25838	R37108	24.83	385.27	15.52	4.00	5.00	15	278.4	Whole embryo	Brain	LID not found
10646	759183	AA421218	5.15	100.31	18.49	6.00	0.00	2	340.31	Neural	Parathyroid	Stomach
10651	41720	R54105	1.08	7.37	6.97	1.00	1.00	19	214.41	Uterus	Brain	Pool
10652	25520	R37696	16.19	195.37	12.07	7.00	5.00	17	162.94	Ear	Parathyroid	Kidney
10653	214985	H72030	11.55	132.27	11.46	0.00	1.00	13	276.85	Foreskin	Prostate	Testis
10650	34486	R44214	82.53	428.97	5.20	2.00	0.00	13	24.9	Lymph	Prostate	Blood
10655	19007	H23529	70.24	819.70	11.67	1.00	5.00	19	186.25	CNS	Adrenal gland	Testis
10677	48411	H09164	6.69	40.85	6.11	2.00	0.00	13	56.88	Gall bladder	Placenta	Parathyroid
10688	287460	H09091	9.73	87.74	9.02	0.00	1.00	11	227.31	CNS	LID not found	Other
10711	595109	AA173928	22.05	156.85	7.20	0.00	0.00	14	282.8	Head and nec	Cervix	Muscle
10716	51604	H18934	4.03	39.90	8.89	3.00	0.00	17	53.56	Prostate	Brain	LID not found
10718	950429	AA599085	19.84	103.13	5.20	0.00	1.00	21	229.15	Ovary	Pool	Brain
10721	841094	AA486780	2.44	25.74	10.55	1.00	0.00	17	307.17	Larynx	Tonsil	Testis
10735	279308	N48354	3.78	20.36	5.37	1.00	0.00	17	109.9	Spleen	Breast	Testis
10737	773639	AA431887	15.00	133.33	8.89	2.00	0.00	22	438.17	Pool	CNS	Heart
10740	51433	H20747	2.50	41.19	16.48	1.00	0.00	10	529.52	Note	LID not found	Other
10741	51986	H23225	4.36	47.76	10.36	0.00	3.00	10	57.93	Neural	Muscle	Kidney
10744	68747	T64919	5.22	208.97	8.64	2.00	4.00	7	141.87	Ear	Germ Cell	Prostate
10746	585197	AA164847	5.22	82.18	15.76	5.00	0.00	3	167.66	Prostate	Pool	LID not found
10747	190815	H39221	8.90	45.34	5.43	1.00	0.00	15	284.58	Aorta	Pool	Uterus
10751	897582	AA496878	69.44	347.66	5.08	1.00	0.00	13	112.48	Foreskin	LID not found	Other
10756	237088	N30782	81.64	567.57	6.95	2.00	0.00	19	123.72	Pool	Heart	LID not found
10763	417978	W90660	10.93	79.73	7.25	0.00	1.00	14	592.27	Pool	Heart	Other
10763	259072	N28356	2.98	17.38	5.87	1.00	0.00	2				
10764	305253	N85011	22.71	235.73	10.33	2.00	0.00					
10768	827697	N82885	4.10	38.47	8.88	1.00	0.00					
10767	309081	N30308	4.39	117.55	26.75	1.00	0.00					
10772	254028	AA004321	34.20	285.72	8.47	3.00	3.00					
10778	426652	T95308	5.96	57.72	8.68	3.00	3.00					
10802	121028	AA005365	9.82	60.93	6.33	1.00	0.00					
10798	429198	AA137073	5.09	38.49	7.76	1.00	0.00					
10802	429186	AA004353	36.44	211.40	5.80	0.00	1.00					
10808	271471	N35025	114.02	607.20	5.33	1.00	0.00					
10814	418081	V80067	4.60	26.13	5.68	1.00	0.00					
10816	260022	N32623	7.60	40.24	5.29	1.00	0.00					

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11036	81316	T60081	17.14	282.19	19.43	1.00	1.00	12	118.94	Emb	CNS	CNS
11038	741956	AA402881	3.13	28.59	9.14	1.00	0.00	11	242.83	Ovary	LID not found	Prostate
11039	34196	R43867	8.40	62.33	8.75	0.00	3.00	9	37.32	Brain	Prostate	Ovary
11041	41122	R54193	7.40	41.20	5.57	2.00	0.00			Pool	LID not found	Other
11043	125085	R00046	38.27	432.24	11.29	2.00	4.00					
11048	743113	AA401397	4.01	43.94	8.13	1.00	0.00	6	118.71	Brain	LID not found	Other
11047	838732	AA457543	66.35	110.09	7.00	3.00	0.00					
11053	49922	H28985	11.47	110.09	9.59	4.00	5.00					
11056	289059	R070520	37.75	200.68	5.32	0.00	1.00	15	75.1	Smooth muscle	Thymus	Placenta
11060	25928	R37815	30.41	311.46	10.24	2.00	5.00	8	151.38	Brain	LID not found	Other
11061	49284	H15534	4.02	34.87	8.87	0.00	1.00	17	53.59	Adrenal gland	Pooled	Lymph
11067	340984	W57872	42.73	353.47	8.51	2.00	3.00	10	373.9	Heart	Pool	LID not found
11074	755861	AA419163	69.90	1385.32	15.41	2.00	0.00	7	52.23	Adrenal gland	Eye	Ovary
11075	638287	AA457485	79.16	417.11	5.27	1.00	0.00					
11078	627640	AA181018	29.35	184.37	8.62	2.00	1.00	19	214.05	Brain	Muscle	Umbilical cord
11079	46667	H05790	20.89	120.73	5.83	0.00	1.00	1	338.35	Colon	Germ Cell	Kidney
11080	598057	AA134885	6.05	45.92	7.59	1.00	0.00	9	418.03	Kidney	Prostate	Prostate
11081	32883	R43318	3.20	34.80	10.57	2.00	0.00	6	309.19	Thyroid	Gall bladder	Gall bladder
11082	858961	AA668674	574.04	3656.31	6.37	1.00	0.00					
11083	627226	AA185463	13.75	157.20	11.43	2.00	0.00	20	38.8	Cervix	Parathyroid	Germ Cell
11085	50562	AA186327	17.87	218.14	12.23	2.00	2.00					
11086	625631	H18793	108.04	628.67	5.82	0.00	1.00					
11093	25081	R38944	25.11	206.06	8.21	4.00	4.00	12	455.53	Breast	Tonsil	Whole embryo
11097	40384	R54822	11.46	69.53	6.07	2.00	0.00	1	711.39	Breast	Lung	Germ Cell
11098	884500	AA529887	301.58	2058.98	6.83	1.00	2.00	4	644.94	Brain	LID not found	Other
11101	50788	H18532	6.88	38.79	5.84	1.00	0.00	5	-4.6	Brain	LID not found	Other
11103	950497	AA595140	32.84	202.63	6.16	0.00	2.00	5	28.08	CNS	Germ Cell	Ovary
11108	25396	R17747	8.12	35.72	5.84	1.00	0.00					
11109	50421	H17308	5.13	33.98	6.82	1.00	0.00					
11114	302532	N90281	5.04	72.42	14.37	3.00	0.00	12	45.2	Ignore	Pooled	Pancreas
11115	288795	N24024	103.58	843.57	6.14	2.00	0.00	15	245.32	Neural	Pooled	Lymph
11116	25335	R39928	7.52	40.01	5.32	0.00	2.00	1	740.59	Pool	Brain	LID not found
11117	50805	H17634	97.71	650.07	6.65	3.00	3.00	10	508.5	Pooled	Lymph	Forebrain
11118	25198	R20755	13.33	285.62	19.93	7.00	4.00					
11120	510060	AA053411	27.02	163.84	6.09	0.00	1.00	11	285.61	Lymph	Breast	Placenta
11122	526945	AA113291	12.16	59.80	6.75	1.00	0.00					
11123	731121	AA417307	14.17	73.75	5.20	0.00	1.00					
11124	25983	R37410	0.98	7.86	7.78	2.00	0.00	12	287.91	Brain	LID not found	Other
11126	509743	AA189372	9.77	143.80	14.70	5.00	1.00					
11127	696078	AA164819	50.61	820.56	16.21	5.00	0.00	12	101.74	Synovial mem	Forebrain	CNS
11128	41214	R56898	0.70	5.31	7.60	3.00	0.00	21	157.88	Brain	LID not found	Other
11133	67440	T48355	33.89	335.05	8.65	1.00	1.00	14	139.45	Ear	Kidney	Brain
11139	195274	R82011	34.01	263.80	7.78	3.00	0.00	12	272.22	Pool	LID not found	Other
11150	270385	N33063	8.00	1136.23	141.94	22.00	2.00					
11154	127230	R03184	12.07	91.10	7.55	3.00	0.00	3	403.91	Ear	Forebrain	Lung
11163	272708	N32295	7.35	56.71	8.13	4.00	0.00	7	653.71	Pool	LID not found	Other
11170	417730	W88497	20.23	116.36	5.75	0.00	1.00	5	378.73	Pool	Lung	LID not found
11171	198326	R92448	10.58	64.88	6.13	1.00	0.00	17	339.78	Bone	Synovial mem	Eye
11174	308238	N92415	12.69	83.89	6.62	1.00	0.00					
11188	415535	W90053	21.32	199.16	9.34	4.00	5.00					
11188	281681	N46057	155.59	1345.02	8.64	4.00	0.00					
11181	281045	N50904	5.72	40.59	7.09	1.00	0.00	7	442.17	CNS	Pancreas	Ovary
11200	278875	N63034	121.50	737.67	6.07	1.00	0.00					

Table 2A

11206	428828	AA005254	2.27	32.71	14.39	2.00	0.00	15	185.7	Brain	Uterus	Tonsil
11207	210554	H85834	3.17	24.37	7.70	1.00	0.00	14	123.82	CNS	LID not found	Other
11208	278759	N62846	4.15	53.38	12.85	2.00	0.00	2	508.52	Tonsil	Lung	Pool
11210	307440	N62947	61.18	887.19	14.50	6.00	5.00	6	997.03	Pool	Muscle	Pancreas
11218	418400	N62798	19.70	100.34	5.03	1.00	0.00	8	548.99	CNS	Pancreas	Testis
11220	502874	AA135866	6.31	84.03	10.11	1.00	0.00	5	343.84	Cervix	Tonsil	Forebrain
11222	131599	R23727	2.43	20.40	8.43	3.00	0.00	1	632.4	Thyroid	Brain	Testis
11227	783575	AA47522	3.08	145.25	47.20	3.00	0.00	15	236.08	Adrenal gland	Blood	Parathyroid
11246	811033	AA45432	10.41	68.40	6.57	0.00	1.00	17	305.6	Lung	Muscle	Prostate
11254	795185	AA453474	18.18	290.55	15.98	5.00	0.00	3	180.78	Adipose	Lymph	Testis
11258	765751	AA496620	4.20	70.39	18.78	1.00	0.00	10	322.77	CNS	Heart	Prostate
11259	811604	AA454610	294.67	1560.16	5.89	1.00	0.00	12	252.49	Blood	Testis	Uterus
11262	284160	N53512	4.39	24.23	5.52	2.00	0.00	7	875.72	Germ Cell	Lymph	Blood
11265	795207	AA453508	3.88	31.10	8.01	0.00	0.00	12	252.49	Forebrain	Pooled	Kidney
11267	143450	R74478	9.82	89.02	8.07	1.00	0.00	3	472.48	Germ Cell	Germ Cell	Breast
11269	490060	AA136060	8.87	47.17	8.87	4.00	0.00	12	20.42	Testis	Pancreas	Heart
11283	485884	AA044814	11.82	88.78	7.51	6.00	0.00	7	875.72	Spleen	Heart	LID not found
11287	418154	W85927	74.78	538.79	7.20	3.00	0.00	3	688.28	Colon	Pool	LID not found
11288	392584	AA059372	41.81	524.80	12.65	0.00	2.00	12	252.49	Liver	Pool	Heart
11289	365107	AA025434	4.72	115.70	24.53	1.00	0.00	3	472.48	Testis	Heart	LID not found
11290	808829	AA455528	77.17	909.87	11.79	3.00	0.00	12	20.42	Germ Cell	Pancreas	Heart
11295	292736	N69383	11.57	85.13	7.36	0.00	2.00	7	875.72	Spleen	Heart	LID not found
11296	348866	W74602	17.34	111.75	8.45	1.00	0.00	3	688.28	Pool	LID not found	Other
11297	795279	AA454022	8.51	42.66	8.55	1.00	0.00	5	251.52	Pool	LID not found	Other
11301	415830	W64790	20.12	188.22	8.36	1.00	0.00	8	31.44	Thyroid	Small intestine	Skin
11303	244012	N38787	37.49	588.81	15.70	4.00	0.00	6	90.95	Pooled	Spleen	Uterus
11309	201172	R98487	16.17	88.43	5.83	1.00	0.00	17	305.86	Adipose	Pleocoma	Tonsil
11317	324205	W47179	179.99	1085.53	6.02	2.00	0.00	3	688.28	Pool	LID not found	Other
11320	471859	AA035144	1.47	17.20	11.66	1.00	0.00	2	568	CNS	Pooled	Eye
11321	490328	AA127741	3.52	45.33	12.86	7.00	1.00	21	18.92	Brain	LID not found	Other
11324	147075	R80235	18.02	106.06	5.89	1.00	0.00	6	201.24	Pooled	Forebrain	Brain
11327	201090	R89848	30.93	170.88	5.52	1.00	0.00	1	591.67	Brain	Brain	LID not found
11330	352409	AA018457	4.24	45.69	10.82	1.00	0.00	18	81.48	Nose	Stomach	Blood
11333	416390	W86860	19.38	103.84	5.35	0.00	1.00	7	546.17	Brain	Pleocoma	LID not found
11344	40598	R65367	2.18	20.70	9.54	2.00	0.00	1	785.21	Brain	Brain	Heart
11347	52865	H29620	68.85	812.86	13.07	4.00	4.00	5	49.48	Muscle	Brain	Heart
11348	52847	H23771	36.81	407.74	6.84	0.00	1.00	2	35.63	Pooled	Brain	LID not found
11349	32299	AA055835	131.51	1281.57	9.59	0.00	1.00	X	236.58	CNS	Pleocoma	Lung
11351	50559	H18790	99.60	753.04	7.56	1.00	3.00	5	527.16	Neural	Thyroid	Brain
11352	47074	H10417	10.95	55.53	5.07	0.00	1.00	11	309.33	Lymph	Tonsil	Brain
11352	51776	H23213	2.21	18.66	7.55	1.00	0.00	4	613.42	Parathyroid	Gall bladder	Kidney
11351	141852	R70503	5.30	28.20	5.32	0.00	1.00	4	870.02	Brain	Aorta	Heart
11352	288563	N62394	3.12	47.72	13.31	11.00	0.00	13	155.48	Brain	LID not found	Other
11353	50114	H18743	6.93	105.65	10.74	4.00	0.00	X	272.16	Larynx	Spleen	Skin
11354	26638	R30098	47.73	328.03	6.87	1.00	3.00	18	113.09	Synovial mem	Skin	CNS
11356	845355	AA644088	18.96	115.78	6.83	2.00	0.00	18	113.09	Synovial mem	Skin	CNS
11373	344432	W73474	38.81	247.67	6.36	1.00	0.00	18	113.09	Synovial mem	Skin	CNS
11376	33022	R44807	63.52	746.53	11.70	8.00	3.00	18	113.09	Synovial mem	Skin	CNS
11377	156437	R73570	8.60	228.89	26.12	1.00	0.00	18	113.09	Synovial mem	Skin	CNS
11389	811064	AA465442	37.84	478.89	12.75	1.00	0.00	18	113.09	Synovial mem	Skin	CNS
11390	854138	AA669272	1.38	14.93	10.85	2.00	0.00	18	113.09	Synovial mem	Skin	CNS
11391	50643	H17551	39.45	319.46	8.10	0.00	1.00	18	113.09	Synovial mem	Skin	CNS

Table 2A

11392	33693	R44707	70.43	923.03	13.11	2.00	4.00	5	358.9	Placenta	Brain	LID not found
11393	432072	AA578278	9.96	71.22	7.15	1.00	0.00	18	477.48	Cervix	Pooled	Tonsil
11395	47054	H11012	2.84	18.65	6.56	2.00	0.00	15	59.38	Brain	Parathyroid	Testis
11398	50300	H17051	3.00	28.16	8.73	2.00	0.00	1	629.81	Brain	LID not found	Other
11403	38900	R57641	48.55	578.34	11.91	4.00	3.00	12	304.02	Brain	LID not found	Other
11408	46385	H03774	24.63	200.07	8.02	2.00	5.00	1	716.02	Blood	Neural	Thymus
11416	658447	AA630600	31.86	544.63	17.04	10.00	0.00	1	171.53	Adipose	Lymph	LID not found
11432	48376	H08088	44.82	384.76	8.59	2.00	5.00	15	629.85	Ear	Brain	Ovary
11433	60738	T40840	2.97	18.05	5.07	1.00	0.00	1	39.72	Brain	CNS	Testis
11434	582491	AA160468	142.34	1029.76	7.23	0.00	4.00	5	94.62	Umbilical cord	Parathyroid	LID not found
11437	29938	R38865	7.38	58.03	7.86	1.00	1.00	7	635.64	Stomach	Colon	Cervix
11441	51083	H11136	1.49	13.89	9.29	1.00	0.00	4	109.02	Spleen	Whole embryo	Brain
11444	49941	H29211	38.29	337.57	9.34	4.00	5.00	8	300.64	Brain	Aorta	Pool
11446	628016	AA187838	28.87	544.51	18.23	1.00	0.00	2	56.48	Pooled	Brain	LID not found
11447	842868	AA488418	40.06	337.37	8.42	0.00	1.00	1	649.11	Blood	Testis	Colon
11448	838898	AA464935	6.92	45.33	6.55	0.00	1.00	12	247.55	Cervix	Germ Cell	Marrow
11452	735573	AA428339	6.72	124.92	18.54	4.00	0.00	21	152.58	Pool	CNS	Whole embryo
11460	52037	H24323	2.94	19.63	6.69	1.00	0.00	9	317.6	Pooled	Germ Cell	Whole embryo
11473	841824	AA487462	17.64	91.09	5.16	1.00	0.00	17	406.94	Brain	LID not found	Other
11477	70384	T54474	28.38	188.40	6.64	3.00	0.00	7	120.51	Lymph node	Head and nec	Forebrain
11480	838668	AA457235	8.00	121.91	15.23	2.00	0.00	3	377.82	Cervix	Brain	Whole embryo
11482	731044	AA421273	18.11	121.44	6.71	0.00	1.00	9	671.95	CNS	Testis	Ovary
11487	842973	AA488332	208.06	1432.61	6.85	1.00	1.00	4	421.53	Tonsil	Lung	Pool
11489	70027	T48767	13.55	76.05	5.61	2.00	0.00	5	625.71	Blood	Spleen	Pancreas
11492	53091	R15764	1.72	26.75	16.69	3.00	0.00	1	260.52	Forebrain	LID not found	Other
11496	758319	AA404273	2.00	17.37	8.87	1.00	0.00	14	104.58	Forebrain	LID not found	Other
11498	32590	R43286	4.34	23.38	5.38	1.00	1.00	12	86.9	Pool	LID not found	Other
11502	587992	AA130586	31.72	257.63	8.12	0.00	1.00	6	272.18	Larynx	Spleen	Skin
11506	840783	AA480092	17.02	261.44	15.36	9.00	0.00	X	245.37	Nose	Kidney	Colon
11510	950887	AA608360	8.23	81.41	9.89	1.00	0.00	21	230.62	Peripheral ner	Neural	Thyroid
11516	28203	R20650	3.10	16.38	5.29	0.00	1.00	10	249.3	Tonsil	Placenta	Pool
11527	288023	N82737	3.98	32.62	8.19	1.00	0.00	1	553.07	Bone marrow	Larynx	Smooth muscle
11534	302025	N89753	6.30	66.71	10.59	2.00	0.00	1	554.83	Skin	Colon	Testis
11536	810737	AA457723	17.34	117.63	6.78	1.00	0.00	1	545.68	Lymph node	Head and nec	Small intestine
11542	124742	R02173	7.18	51.57	7.18	0.00	2.00	1	538.82	Colon	Lung	Tonsil
11554	479533	AA007572	34.31	183.25	5.34	1.00	0.00	1	538.82	Colon	Lung	Testis
11580	290748	R71792	4.26	22.73	5.33	1.00	0.00	1	538.82	Colon	Lung	Testis
11580	415904	W80185	5.77	42.00	7.28	3.00	0.00	1	538.82	Colon	Lung	Testis
11586	268288	N26603	15.68	102.37	6.53	1.00	0.00	1	538.82	Colon	Lung	Testis
11590	415694	W85387	3.87	41.48	10.7	2.00	0.00	1	538.82	Colon	Lung	Testis
11604	281091	N87878	18.53	102.08	5.51	0.00	1.00	1	538.82	Colon	Lung	Testis
11617	810050	AA455286	32.08	192.03	5.99	3.00	0.00	1	538.82	Colon	Lung	Testis
11618	298087	N69044	524.79	4910.39	8.36	2.00	0.00	1	538.82	Colon	Lung	Testis
11620	416321	W82041	3.44	24.85	7.23	2.00	0.00	1	538.82	Colon	Lung	Testis
11622	256033	N30316	6.26	34.38	5.49	3.00	0.00	1	538.82	Colon	Lung	Testis
11623	810821	AA464744	6.05	32.34	5.35	2.00	0.00	1	538.82	Colon	Lung	Testis
11624	562729	AA088471	9.30	468.41	50.13	3.00	0.00	1	538.82	Colon	Lung	Testis
11630	293409	N68864	541.51	4030.44	0.12	1.00	0.00	1	538.82	Colon	Lung	Testis
11631	810082	AA464852	50.50	308.50	6.10	2.00	0.00	1	538.82	Colon	Lung	Testis
11632	377441	AA055242	8.52	126.13	19.33	2.00	0.00	1	538.82	Colon	Lung	Testis
11636	261274	H88255	6.87	48.50	6.77	0.00	1.00	1	538.82	Colon	Lung	Testis
11639	245137	N54395	2.84	30.80	10.49	4.00	0.00	1	538.82	Colon	Lung	Testis
11640	756595	AA444051	21.04	251.75	30.75	3.00	0.00	1	538.82	Colon	Lung	Testis
11643	502221	N77828	20.48	135.65	6.67	2.00	0.00	1	538.82	Colon	Lung	Testis
11645	357544	W84083	11.51	100.88	8.76	0.00	2.00	1	538.82	Colon	Lung	Testis

Table 2A

11649	489047	AA047190	5.14	79.80	15.53	0.00	2.00	8	189.84	Germ Cell	Uterus	-
11652	270038	NZ7629	80.86	466.50	5.77	1.00	0.00					Brain
11657	325333	W52190	2.85	25.62	8.94	1.00	0.00				Germ Cell	Heart
11669	609479	AA443121	5.55	58.36	10.52	1.00	0.00				Ovary	Lymph
11678	810772	AA481745	7.13	42.80	6.01	2.00	0.00				Pooled	Pancreas
11679	376308	AA041254	5.61	44.52	7.93	1.00	0.00				Brain	Foreskin
11682	278504	N61139	3.75	32.12	6.56	2.00	0.00				Skin	
11684	282108	N51499	42.44	302.25	7.12	0.00	1.00				Heart	LID not found
11685	418237	W90748	11.11	92.30	8.31	1.00	0.00				Pool	LID not found Other
11688	426124	AA002081	11.68	115.02	9.85	3.00	0.00				Synovial mem	Head and nec
11695	289182	N75473	12.15	63.41	5.22	1.00	0.00				Larynx	Stomach
11697	770997	AA427715	33.95	548.03	16.14	1.00	0.00				Adipose	
11704	415951	W88282	27.06	158.32	5.04	0.00	1.00					
11711	281039	NA7717	31.87	170.13	5.34	1.00	0.00				Stomach	Brain
11713	324927	W49494	4.12	23.57	5.72	1.00	0.00				Stomach	Esophagus
11723	845118	AA844234	236.75	1212.10	5.12	1.00	0.00				Umbilical cord	Whole embryo
11726	611566	AA176957	5.14	34.50	6.72	1.00	0.00				Muscle	Ear
11728	21144	W72562	21.34	123.48	5.79	1.00	2.00				Tonsil	Whole embryo
11731	814353	AA438838	29.89	303.93	10.17	0.00	1.00				Blood	Pancreas
11735	53103	R15794	93.34	825.31	8.84	3.00	3.00				Brain	LID not found Other
11757	340957	W56771	22.51	256.14	11.47	2.00	0.00				Smooth musc	Germ Cell
11761	454190	AA677033	10.84	54.72	5.05	1.00	0.00				Ignore	Synovial mem
11763	202263	R97710	15.77	84.82	5.38	1.00	0.00				Spleen	Gall bladder
11773	60586	AA628666	2.73	28.30	10.75	1.00	0.00				Head and nec	Thyroid
11776	179163	H50114	7.60	496.55	8.15	7.00	0.00				Omentum	Stomach
11782	51408	H18950	10.34	37.12	5.93	13.00	1.00				Brain	LID not found
11784	25153	R3876	5.40	37.16	6.89	1.00	1.00				Eye	Blood
11789	503579	AA131208	4.36	29.41	6.75	2.00	0.00				Kidney	LID not found Other
11792	46183	H08516	1.57	11.58	7.36	1.00	1.00				Whole embryo	Uterus
11795	378813	AA683520	97.87	639.36	6.53	1.00	0.00				Brain	LID not found Other
11800	51593	H24020	2.23	11.87	5.24	0.00	1.00				Eye	LID not found
11801	755517	AA419088	8.11	40.97	5.05	1.00	0.00				Head and nec	Adipose
11808	47282	H10709	2.38	14.45	6.05	1.00	0.00				Brain	LID not found
11809	68221	H10228	2.23	13.48	6.05	1.00	0.00				Brain	LID not found Other
11810	508887	AA058485	52.54	400.36	7.68	0.00	2.00				Brain	Esophagus
11817	46097	H08786	1.97	11.13	5.65	1.00	0.00				Brain	LID not found Other
11820	26387	R36804	6.33	34.34	6.43	1.00	0.00				Brain	LID not found Other
11821	51848	H20826	45.73	599.97	13.12	8.00	3.00				Heart	LID not found
11822	364839	AA053982	30.51	279.50	9.16	0.00	5.00				Heart	LID not found
11825	40808	R55809	2.91	100.79	34.85	1.00	1.00				Aorta	Lung
11827	840576	AA487895	148.68	981.14	6.55	0.00	3.00				Neural	Synovial membrane
11828	32050	R41972	11.49	56.22	6.07	1.00	0.00				Nose	Aorta
11833	40771	R56045	5.65	38.52	6.81	1.00	2.00				Smooth musc	Brain
11836	26520	R20870	8.30	70.82	8.54	1.00	0.00				Brain	LID not found Other
11840	563592	AA101155	113.34	734.17	6.48	4.00	4.00				Pooled	Whole embryo
11841	47451	H11895	1.84	11.63	7.08	1.00	0.00				Brain	Foreskin
11842	592602	AA158244	11.20	74.01	0.44	4.00	0.00				Brain	Uterus
11845	51700	H23524	2.88	31.19	10.84	1.00	0.00				Bone	Heart
11847	827105	AA190634	10.28	54.65	5.32	0.00	1.00				Testis	LID not found
11851	839784	AA305003	25.86	480.86	18.60	6.00	3.00				Eye	LID not found Other
11854	742541	AA400013	7.81	56.36	7.47	0.00	1.00				Testis	Parathyroid
11857	41192	R56134	37.30	517.67	13.88	5.00	5.00				Lymph	Ovary
11859	511718	AA121158	39.36	268.78	7.34	1.00	3.00				Pool	LID not found
11860	51952	H23230	116.78	633.05	5.42	2.00	3.00				Brain	LID not found Other

Table 2A

11861	49728	H29198	4.23	22.08	5.21	1.00	0.00	Tonsil	Germ Cell	Brain	Brain
11869	49839	H29265	13.95	72.82	5.22	1.00	0.00	Brain	Testis	LID not found	LID not found
11873	52852	H28638	2.13	30.06	14.09	2.00	0.00	Brain	Testis	LID not found	LID not found
11875	757187	AA486139	6.05	34.13	6.64	1.00	0.00	Brain	Testis	LID not found	LID not found
11877	46752	H29265	8.09	51.27	8.41	1.00	0.00	Prostate	Prostate	Eye	Eye
11878	276805	N40834	84.35	935.13	9.89	0.00	3.00	Lung	Colon	Pool	Pool
11881	46827	H10045	3.31	114.04	34.44	8.00	2.00	Whole embryo	Blood	Whole embryo	Whole embryo
11884	33122	R44477	178.57	1301.83	7.26	2.00	2.00	Brain	Brain	Eye	Eye
11887	842984	AA488341	33.90	238.88	7.05	1.00	0.00	Prostate	Prostate	LID not found	LID not found
11888	23869	R38179	3.57	22.10	6.20	1.00	0.00	Brain	Brain	LID not found	LID not found
11889	41228	R58953	0.95	6.63	6.97	1.00	0.00	Brain	Brain	LID not found	LID not found
11890	1048033	AA776875	20.84	412.55	19.80	0.00	1.00	LID not found	Brain	LID not found	LID not found
11892	33150	R43822	6.62	60.98	8.94	3.00	0.00	LID not found	Brain	LID not found	LID not found
11895	266347	N28740	4.98	130.46	26.33	1.00	0.00	LID not found	Brain	LID not found	LID not found
11896	50782	H17024	165.49	1777.73	10.74	2.00	3.00	Brain	Heart	LID not found	LID not found
11897	51242	H18343	2.18	18.64	8.51	3.00	2.00	Brain	Heart	LID not found	LID not found
11899	321984	W078003	18.16	150.26	6.30	2.00	3.00	Parathyroid	Parathyroid	LID not found	LID not found
11900	34388	R44265	1.57	18.05	10.23	3.00	0.00	Brain	Brain	LID not found	LID not found
11901	61870	T49557	89.92	563.55	6.27	0.00	2.00	Brain	Brain	Lymph	Lymph
11906	428585	AA005329	7.16	37.89	5.31	0.00	1.00	Bone	Neural	Tonsil	Tonsil
11911	210803	H67707	125.14	694.85	5.55	2.00	0.00	Brain	Brain	Brain	Brain
11928	292697	N63628	7.16	34.56	5.39	1.00	0.00	Uterus	Uterus	LID not found	LID not found
11930	491405	AA150417	6.32	32.27	5.11	1.00	0.00	Thyroid	Thyroid	Bone	Bone
11931	290280	N64464	3.74	28.88	8.00	3.00	0.00	CNS	CNS	Brain	Brain
11935	211870	H66708	39.78	222.46	5.98	1.00	1.00	Pool	Pool	LID not found	LID not found
11944	290429	N84532	2.37	64.08	27.03	2.00	0.00	Pool	Pool	LID not found	LID not found
11946	128167	R12386	81.06	1031.07	12.72	3.00	0.00	Neural	Neural	Brain	Brain
11948	283058	N51291	37.62	215.01	5.72	1.00	0.00	CNS	CNS	LID not found	LID not found
11950	340884	W55597	5.81	91.03	16.22	1.00	0.00	Placenta	Placenta	Pool	Pool
11962	355842	AA025930	5.43	58.03	10.33	6.00	0.00	Testis	Testis	LID not found	LID not found
11963	250954	N50845	3.97	33.51	8.45	2.00	0.00	CNS	CNS	Pool	Pool
11966	795851	AA461529	3.14	24.18	7.69	1.00	0.00	Heart	Heart	LID not found	LID not found
11968	343401	W67228	185.27	1859.85	10.04	3.00	0.00	Testis	Testis	LID not found	LID not found
11975	212101	H68938	6.70	36.41	5.43	1.00	0.00	CNS	CNS	Pool	Pool
11976	278669	N86607	5.21	26.90	5.18	2.00	0.00	Thyroid	Thyroid	LID not found	LID not found
11979	197087	R93401	2.75	18.52	6.74	1.00	0.00	CNS	CNS	Whole embryo	Whole embryo
11980	357819	W65480	3.81	19.61	5.42	1.00	0.00	Pool	Pool	LID not found	LID not found
11984	427789	AA001604	13.69	114.41	6.36	0.00	3.00	Prostate	Prostate	LID not found	LID not found
11989	282663	N50050	284.60	1688.08	6.21	2.00	0.00	Prostate	Prostate	LID not found	LID not found
11988	427906	AA001841	8.71	52.38	7.81	1.00	0.00	Placenta	Placenta	Germ Cell	Germ Cell
12003	279965	N57551	14.33	100.27	7.00	2.00	0.00	Bone	Bone	Aorta	Aorta
12007	188868	H82872	24.43	187.52	8.86	1.00	0.00	Pool	Pool	LID not found	LID not found
12008	435551	AA701914	4.24	99.38	23.45	4.00	0.00	Placenta	Placenta	LID not found	LID not found
12011	195835	R89317	11.25	119.15	10.59	5.00	0.00	Small intestine	Small intestine	Prostate	Prostate
12012	359861	AA011086	15.33	92.67	6.04	2.00	0.00	Placenta	Placenta	Germ Cell	Germ Cell
12016	238059	H53703	8.29	259.74	31.33	5.00	1.00	Testis	Testis	LID not found	LID not found
12018	609534	AA484498	104.92	755.78	7.20	2.00	0.00	Testis	Testis	LID not found	LID not found
12019	504461	AA152183	9.21	123.28	13.39	1.00	0.00	Skin	Skin	Adrenal gland	Adrenal gland
12022	320509	W04674	125.52	804.80	7.15	1.00	0.00	Head and neck	Head and neck	Lymph	Lymph
12026	795531	AA459858	4.16	26.09	6.27	1.00	0.00	Kidney	Kidney	Uterus	Uterus
12032	432564	AA693561	46.86	266.65	5.81	3.00	0.00	Uterus	Uterus	Parathyroid	Parathyroid
12033	289640	AA098386	2.01	18.40	9.15	1.00	0.00	Liver	Liver	Parathyroid	Parathyroid
12035	344480	H53562	22.35	191.34	8.56	3.00	0.00	Testis	Testis	Blood	Blood
12040	290091	N83260	11.59	72.82	8.28	2.00	0.00	CNS	CNS	Germ Cell	Germ Cell
12045	505575	AA147641	10.22	65.99	8.45	1.00	0.00	Uterus	Uterus	LID not found	LID not found

Table 2A

12046	124447	R01094	17.48	123.68	7.07	5.00	0.00	2	680.88	Ovary	Spleen	Colon
12049	491311	AA150198	2.52	15.90	6.31	2.00	0.00	2	680.88	Ovary	LID not found	Other
12051	324323	AA17552	10.21	69.89	6.84	3.00	0.00	8	483.25	Uterus	LID not found	Other
12053	501876	AA128008	87.99	657.11	8.19	3.00	0.00	18	27.41	Uterus	Pool	LID not found
12054	429165	AA005108	10.29	55.37	5.38	1.00	0.00	11	292.28	Neural	Esophagus	Thymus
12056	834636	AA630094	38.84	351.88	10.54	8.00	0.00	5	564.08	Larynx	Esophagus	Thymus
12059	204538	H59250	99.06	613.60	6.26	1.00	0.00	5	356.9	Bone	Bone	Blood
12060	291890	N87487	67.91	404.61	5.86	1.00	0.00	1	62.05	Skin	Prostate	LID not found
12061	502618	AA136052	2.88	33.04	11.48	1.00	0.00	21	142.57	Uterus	Head and nec	Adipose
12063	502333	AA156763	24.09	155.77	6.47	2.00	0.00	20	267.89	Head and nec	Cervix	Adipose
12066	795687	AA459537	4.98	36.48	7.33	3.00	0.00	1	15.88	Muscle	Uterus	Brain
12069	502634	AA427017	35.10	445.08	12.88	7.00	0.00	1	480.31	Breast	Small intestine	Ovary
12071	810711	AA457700	34.03	205.23	6.02	1.00	0.00	10	480.31	Breast	Small intestine	Ovary
12073	501890	AA128017	2.81	37.99	8.94	2.00	0.00	12	298.78	Bone	Kidney	Ovary
12077	770789	AA427621	5.18	23.49	7.24	2.00	0.00	15	147.26	Gall bladder	Bone	Ovary
12085	301897	N82476	12.26	68.39	5.68	1.00	0.00	15	147.26	Gall bladder	Bone	Ovary
12086	771080	AA427622	5.60	60.48	9.01	1.00	0.00	1	568.94	Pool	Bone	LID not found
12087	202194	H52376	3.17	23.48	7.41	1.00	0.00	1	568.94	Pool	Bone	LID not found
12088	856135	AA630604	0.84	6.24	9.68	2.00	0.00	18	200.17	Small intestine	Skin	CNS
12089	491244	AA152299	2.47	15.99	6.47	2.00	0.00	12	68.19	Uterus	LID not found	Other
12092	590284	AA155913	130.40	677.23	5.19	1.00	0.00	12	68.19	Uterus	LID not found	Other
12093	503749	AA131469	4.93	45.82	9.30	1.00	0.00	6	328.81	Uterus	LID not found	Other
12094	144825	R78521	536.48	8988.67	16.78	5.00	0.00	19	271.02	Uterus	LID not found	Other
12103	810444	T40725	41.18	403.09	9.79	5.00	0.00	1	247.37	Spleen	Lymph	Pool
12104	48931	H10030	3.68	19.99	5.41	0.00	1.00	14	247.37	Brain	Testis	Prostate
12108	51511	H18958	3.06	17.92	5.77	2.00	0.00	14	175.38	Heart	Brain	Breast
12113	45578	H07920	3.50	224.15	63.98	2.00	1.00	14	175.38	Heart	Muscle	Lymph
12119	81402	T46927	2.31	14.80	6.41	1.00	0.00	1	173.21	Brain	Liver	LID not found
12120	50983	H18017	1.08	6.60	6.10	1.00	0.00	1	173.21	Brain	Liver	LID not found
12122	432253	AA689427	10.02	73.88	7.38	1.00	0.00	17	534.21	Blood	Whole embryo	Tonsil
12123	48716	H10012	4.26	28.77	8.98	1.00	0.00	20	73.18	Head and nec	Blood	Pool
12128	141815	R70685	25.04	189.33	7.66	2.00	0.00	20	73.18	Head and nec	Blood	Pool
12130	279780	N48355	49.38	280.10	6.17	1.00	0.00	X	337.33	CNS	Tonsil	Uterus
12131	85409	T71891	82.22	506.27	5.49	1.00	0.00	1	606.38	Larynx	Thymus	Stomach
12134	724888	AA291484	3.75	119.61	31.92	10.00	0.00	1	151.1	Ovary	Eye	Heart
12136	34321	R44848	1.63	10.11	6.20	1.00	0.00	10	90.1	Brain	LID not found	Other
12138	502367	AA134871	48.83	437.30	9.34	1.00	0.00	22	154.77	Ignore	Placenta	Esophagus
12139	51700	H22854	7.76	118.71	15.29	1.00	0.00	9	257.9	Small intestine	CNS	Brain
12140	25984	R37411	1.82	73.60	40.50	4.00	3.00	9	257.9	Small intestine	Brain	LID not found
12143	77911	T61269	11.40	168.77	16.56	1.00	0.00	8	447.53	Liver	Fore skin	Pool
12145	855745	AA663981	29.67	3034.57	102.27	9.00	0.00	14	278.45	Brain	Heart	Pool
12148	45591	H08194	4.44	47.48	10.68	1.00	0.00	7	30.48	Brain	Lung	LID not found
12150	834401	AA688959	15.45	87.81	5.68	1.00	0.00	10	313.32	Pool	Thymus	Synovial membrane
12152	34442	R44965	49.64	590.37	11.89	1.00	0.00	7	482.68	Small intestine	Whole embryo	Brain
12153	77539	T58775	41.58	351.19	8.45	3.00	0.00	3	143.12	CNS	Liver	LID not found
12154	855755	AA663986	227.17	1788.14	7.88	1.00	0.00	19	235.13	Umbilical cord	Skin	Stomach
12160	49328	H10641	2.32	20.61	11.57	2.00	0.00	16	206.38	Brain	LID not found	Other
12162	883380	AA634108	13.50	98.24	7.27	3.00	0.00	1	576.51	Placenta	Aorta	Gall bladder
12163	83345	T86440	110.82	1275.71	11.51	3.00	0.00	9	140.54	Pool	Liver	Fore skin
12164	32331	R42922	81.54	770.47	9.45	3.00	0.00	1	258.93	Brain	LID not found	Other
12169	307471	N93555	28.77	160.20	5.38	1.00	0.00	X	115.67	Adrenal gland	Ear	Eye
12189	745019	AA626028	8.25	43.41	6.95	2.00	0.00	11	248.08	Tonsil	Gall bladder	Pancreas
12170	307660	N92901	21.63	766.95	35.45	1.00	0.00	12	348.48	Stomach	Spleen	Placenta
12171	47428	H11068	12.11	90.46	7.47	0.00	1.00	12	348.48	Stomach	Spleen	Placenta

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12172	40100	R54580	3.74	35.76	9.56	2.00	0.00	1	674.22	CNS	CNS	Lung
12173	345628	W72051	12.83	19.91	8.15	1.00	0.00	6	43.37	Thyroid	CNS	Brain
12174	530185	AA111969	12.83	93.28	7.27	1.00	0.00	1	597.06	Brain	Lymph	Tonsil
12175	49443	H15427	11.13	9.47	6.17	1.00	1.00	12	51.04	Cobn	LID not found	Other
12176	78565	T52854	11.13	56.82	5.11	2.00	0.00	17	56.08	Brain	Bone	Lung
12180	50443	H17325	1.49	6.81	9.90	1.00	0.00	5	116.08	Pooled	LID not found	Other
12181	739155	AA421618	25.69	382.06	14.78	0.00	1.00	19	268.89	Esophagus	Ovary	Whole embryo
12185	740804	AA479795	16.77	146.77	8.87	2.00	0.00	18	62.78	Germ Cell	Gall bladder	Blood
12189	431655	AA676453	16.77	55.57	5.21	1.00	0.00	18	238.33	Brain	Forebrain	Breast
12192	32587	R43585	36.21	546.94	15.10	2.00	4.00	X	634.21	Smooth muscle	Forebrain	Prostate
12193	83368	T64445	16.39	134.75	8.12	4.00	0.00	4	634.21	Gall bladder	Liver	Spleen
12201	84713	T74297	8.01	47.51	5.93	2.00	0.00	4	667.01	Brain	LID not found	Other
12202	25132	R37620	28.43	155.76	5.29	2.00	0.00	1	71.09	Thyroid	Testis	Heart
12210	89629	AA461769	43.33	220.08	5.08	0.00	1.00	19	89.36	Gall bladder	Blood	Lymph
12213	46977	H10372	168.82	2024.13	12.15	0.00	4.00	13	137.52	Thymus	Lymph	Cervix
12217	67759	T49652	11.14	75.15	6.74	2.00	0.00	3	319.26	Testis	Omentum	Larynx
12218	73556	AA426182	198.52	1230.96	6.20	0.00	2.00	17	341.89	Ear	Pooled	Brain
12219	843008	AA468391	117.75	1108.01	9.41	0.00	1.00	17	552.2	Stomach	Placenta	Aorta
12227	842946	AA469324	70.39	482.08	6.08	1.00	2.00	5	630.22	Brain	LID not found	Other
12235	510464	AA056565	63.42	451.49	7.12	2.00	0.00	8	362.31	Brain	Pool	Parathyroid
12237	43903	H19677	3.04	118.26	36.82	3.00	0.00	1	89.33	Forebrain	Pool	Tonsil
12240	786760	AA460722	60.77	633.37	10.42	1.00	2.00	15	737.83	Thyroid	Uterus	Cobn
12244	23774	R38188	6.81	55.60	8.41	3.00	0.00	8	63.62	Testis	Forebrain	Thyroid
12245	46551	H10678	7.60	50.71	8.67	4.00	2.00	9	483.92	Brain	LID not found	Other
12247	234977	H73640	8.43	60.55	6.42	0.00	2.00	10	348.63	Cervix	-	LID not found
12250	786285	AA460848	26.70	137.22	5.14	1.00	0.00	1	720.56	Thymus	Cervix	Forebrain
12254	602277	AA198597	18.64	95.67	5.19	1.00	0.00	X	245.06	Whole embryo/Heart	Brain	Whole embryo
12259	897761	AA588468	120.52	741.07	6.15	0.00	1.00	16	502.56	Parathyroid	Heart	Cervix
12260	27282	R38543	3.49	33.77	9.87	2.00	0.00	16	610.47	Thyroid	Placenta	Cervix
12261	52755	H28783	8.47	219.72	23.20	0.00	0.00	5	20.17	Heart	Ear	Lung
12266	612809	AA179800	5.25	30.81	5.87	0.00	1.00	19	382.31	Brain	Brain	Brain
12267	836774	AA437566	2.16	27.87	12.69	2.00	0.00	1	20.17	Thyroid	Tonsil	Kidney
12268	22773	R36613	187.84	2394.83	12.75	2.00	0.00	4	502.56	Stomach	Colon	Unilateral cord
12271	731270	AA416584	11.64	81.66	5.30	0.00	1.00	15	450.37	Kidney	Lymph	Parathyroid
12272	136399	R34297	72.17	408.81	6.81	0.00	1.00	4	307.86	Germ Cell	Parathyroid	Testis
12276	23116	R39179	95.08	674.88	7.10	4.00	3.00	15	610.47	Lung	LID not found	Other
12281	41198	R58970	31.78	180.64	5.08	1.00	0.00	4	307.86	Adipose	LID not found	Other
12282	40643	H10072	5.10	27.22	6.26	1.00	0.00	21	643.02	Forebrain	Umbilical cord	Lymph
12283	731023	AA421266	8.09	40.62	5.02	0.00	1.00	11	170.13	Tonsil	Prostate	Parathyroid
12285	50768	H17463	4.91	67.50	13.74	1.00	0.00	11	246.52	Trachea	Parathyroid	Thyroid
12286	266503	N67366	88.20	563.46	6.54	0.00	1.00	1	81.33	Pool	LID not found	Other
12290	320209	W04509	3.54	27.56	7.78	0.00	1.00	14	75.08	Parathyroid	Whole embryo	Testis
12300	294091	N70756	65.05	501.31	7.71	2.00	2.00	1	81.33	Pool	Whole embryo	Testis
12304	303360	N35967	171.56	1303.92	7.60	2.00	3.00	1	81.33	Pool	Whole embryo	Testis
12306	764214	AA448665	40.13	280.96	7.00	1.00	0.00	14	75.08	Parathyroid	Whole embryo	Testis
12307	251147	H97368	18.98	104.47	5.51	0.00	1.00	1	81.33	Pool	Whole embryo	Testis
12316	525478	AA065042	9.73	110.92	11.40	4.00	0.00	1	81.33	Pool	Whole embryo	Testis
12318	260170	N32072	24.77	316.35	12.77	2.00	0.00	1	81.33	Pool	Whole embryo	Testis
12322	510273	AA053165	167.30	2378.38	14.22	6.00	0.00	1	81.33	Pool	Whole embryo	Testis
12323	301805	N84488	8.91	114.36	12.84	4.00	2.00	1	81.33	Pool	Whole embryo	Testis
12343	259275	N32847	600.52	8798.12	11.32	2.00	0.00	1	81.33	Pool	Whole embryo	Testis
12344	321805	W37683	8.39	161.74	19.27	1.00	1.00	1	81.33	Pool	Whole embryo	Testis
12351	584323	AA189202	15.71	83.20	5.29	1.00	0.00	1	81.33	Pool	Whole embryo	Testis
12358	127368	R08546	28.49	133.72	5.05	0.00	1.00	1	81.33	Pool	Whole embryo	Testis
12362	510380	AA055404	79.28	666.72	8.41	0.00	5.00	1	81.33	Pool	Whole embryo	Testis

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12363	261408	H98987	676.82	4011.17	5.91	1.00	0.00	3	139.88	Blood	Foreskin	Heart
12364	291082	N72113	97.45	463.39	5.78	0.00	1.00	17	365.71	Muscle	Tonsil	Foreskin
12370	299723	N75055	32.59	276.70	8.49	0.00	1.00	11	276.96	Cervix	Aorta	Breast
12374	950903	AA608646	34.08	181.50	5.19	0.00	1.00			Thyroid	Ear	Adrenal gland
12382	773293	AA425214	3.52	76.41	21.70	1.00	0.00			Pooled	Muscle	Breast
12384	308448	N95490	93.80	671.66	7.16	0.00	2.00				Lung	Pool
12387	298226	N70837	3.44	21.89	6.37	2.00	0.00			Aorta	Ovary	Eye
12395	298568	N87305	37.55	353.83	9.43	0.00	1.00	7	84.81	Colon	LID not found	Other
12402	309819	N60784	3.14	51.61	16.44	0.00	1.00			Thyroid	Whole embryo	Lung
12404	930594	AA608531	8.80	91.05	10.23	1.00	0.00	1	669.84	Ear	Prostate	Whole embryo
12406	743314	AA400492	3.81	21.93	5.75	1.00	0.00			Testis	LID not found	Other
12411	304868	N83187	13.85	82.18	8.65	1.00	1.00	5	509.68	Heart	LID not found	Other
12419	305408	N95073	59.74	502.87	8.42	0.00	3.00			Parathyroid	LID not found	Other
12420	758343	AA042269	126.17	850.44	5.16	0.00	1.00	10	381.57		Tonsil	Colon
12421	911776	AA088439	55.43	1150.75	20.70	0.00	3.00	10	45.1	Kidney	Head and nac	Ear
12431	794016	AA442698	42.85	298.82	6.91	1.00	1.00			Cervix	Prostate	Prostate
12441	794016	AA191548	34.14	183.71	5.38	0.00	1.00				Tonsil	Prostate
12444	743297	AA400422	22.29	165.43	7.42	0.00	1.00			Ear	Adrenal gland	Parathyroid
12448	840530	AA487934	36.21	298.35	8.24	2.00	0.00					
12461	489633	AA101878	20.27	318.06	15.74	0.00	1.00					
12463	757327	AA437094	24.84	140.70	5.66	0.00	1.00	4	490.66	Heart	Pool	LID not found
12465	375085	AA040369	3.76	36.98	9.83	0.00	2.00				LID not found	Other
12468	324762	AA284112	7.77	71.23	9.16	1.00	4.00			Pool	LID not found	Other
12468	242009	H93318	7.91	88.94	11.24	1.00	0.00			Testis	Parathyroid	Kidney
12470	742830	AA406048	7.47	38.53	5.16	1.00	0.00	14	280.52	Whole embryo	Kidney	LID not found
12471	795166	AA461084	120.27	788.29	6.55	0.00	2.00			Pooled	Tonsil	
12475	323251	VW2896	0.84	4.42	5.25	1.00	0.00	2	467.65			
12476	133257	T83846	12.99	188.46	14.51	0.00	2.00			Muscle	LID not found	Other
12477	524247	AA100595	94.96	843.60	8.84	1.00	2.00	11	301.58	Brain	LID not found	Other
12482	292982	N89100	33.00	217.30	6.59	4.00	0.00			Testis	LID not found	Other
12483	1031599	AA609485	8.51	77.75	9.14	0.00	3.00			Ovary	Placenta	Brain
12485	134297	R31933	110.55	750.61	6.79	0.00	2.00	1	866.75	Stomach	Brain	Pool
12488	48142	H12105	6.34	50.11	7.91	0.00	1.00			Testis	LID not found	Other
12489	1031807	AA609744	8.81	74.79	10.98	1.00	0.00	9	377.24	Ovary	LID not found	Other
12489	77371	T55340	64.66	484.12	5.48	0.00	1.00	6	79.75	Smooth muscle	Pooled	Thymus
12489	788205	AA463420	16.45	107.33	5.82	1.00	0.00	5	380.7	Brain	LID not found	Other
12489	43840	H04795	6.91	38.33	5.26	0.00	1.00			Pancreas	Kidney	Heart
12489	1031819	AA609749	54.00	370.29	6.86	0.00	1.00			Testis	LID not found	Other
12489	1031718	AA609585	60.21	508.50	8.45	0.00	2.00	6	483.04	Brain	LID not found	Other
12504	41893	R59560	51.47	398.04	7.73	2.00	5.00	1	722.7	Forebrain	Bone	Eye
12506	298468	N70203	116.59	884.90	7.69	0.00	2.00	X	143.33	Testis	LID not found	Other
12507	1031748	AA609599	4.41	48.96	11.10	1.00	0.00	20	194.39	Tonsil	Heart	Brain
12511	788280	AA424950	14.35	86.83	6.19	1.00	0.00	5	320.68	Brain	LID not found	Other
12512	35386	R45567	33.88	313.65	9.23	2.00	5.00	1	82.43	Spleen	LID not found	Other
12517	74283	T55238	1156.15	5807.59	5.02	1.00	0.00			Pancreas	LID not found	Other
12518	583028	AA159356	6.05	60.40	9.99	1.00	0.00	14	151.82	Ovary	LID not found	Other
12525	73472	T55437	39.85	590.69	9.37	0.00	3.00	8	377.31	Pool	LID not found	Other
12526	535972	AA165116	85.83	627.56	7.31	0.00	2.00	12	200.16	Pancreas	Blood	Whole embryo
12527	811927	AA464668	40.84	427.84	10.52	0.00	0.00					
12528	35626	R45292	23.27	312.81	13.44	0.00	2.00			Testis	LID not found	Other
12531	1031767	AA609528	121.20	871.57	7.18	0.00	2.00	3	484.87	Germ Cell	Heart	Kidney
12535	36481	R46700	1.89	10.11	5.36	1.00	0.00			Pool	LID not found	Other
12538	294685	N71903	228.24	2498.37	10.95	0.00	2.00	15	171.5	Breast	Pancreas	Uterus
12548	665405	AA195002	19.86	111.28	5.60	1.00	0.00					

Table 2A

12540	38818	R49144	978.67	9313.36	9.52	0.00	1.00	2	682.76	Colon	Pool
12550	694176	AA168488	74.70	595.57	7.97	0.00	4.00	5	413.49	LID not found	Other
12555	1031785	AA608648	30.93	499.68	15.17	0.00	4.00	20	193	Testis	Thyroid
12557	271916	R402008	730.67	7138.07	9.77	0.00	2.00	5	511.76	Adipose	Brain
12558	594226	AA169535	305.00	1528.60	5.01	0.00	1.00			LID not found	LID not found
12563	1031836	AA608645	42.40	500.01	11.79	0.00	4.00			Pool	LID not found
12567	665356	AA164983	16.91	122.78	7.28	1.00	1.00	22	27.42	Thyroid	Brain
12568	327175	R43521	5.65	30.93	5.47	0.00	1.00	12	311.24	Brain	LID not found
12573	767690	AA417650	10.68	95.74	8.96	1.00	0.00	4	422.79	Adipose	CNS
12586	767706	AA417656	55.25	1348.92	24.41	0.00	0.00	2	599.88	Foreskin	Parathyroid
12592	280807	N47312	37.55	195.86	5.22	1.00	0.00	X	317.73	Adipose	Adrenal gland Pooled
12597	767721	AA417982	10.09	81.46	6.09	0.00	1.00	11	339.35	Foreskin	Pool
12603	34883	R51305	2.72	30.89	11.37	0.00	4.00	3	419.03	Colon	Testis
12607	439663	H04828	24.05	401.19	18.68	4.00	5.00	16	358.39	Testis	Brain
12608	271744	N31585	5.34	36.35	10.21	0.00	1.00	4	427.39	Foreskin	Colon
12620	1492104	AA688140	821.50	2629.07	5.04	0.00	1.00	X	295.78	Heart	Head and neck
12623	43784	H05089	29.07	321.68	11.06	0.00	4.00	19	255.55	Heart	Lung
12630	785542	AA450338	14.39	104.77	7.28	1.00	0.00	14	214.37	Whole embryo/Uterus	Prostate
12631	43678	H05939	3.18	25.00	7.86	3.00	0.00			Brain	Lung
12638	785585	AA449444	4.74	110.99	23.41	7.00	0.00			Stomach	Whole embryo/Germ Cell
12641	754449	AA410298	16.42	81.22	5.56	0.00	2.00	2	412.17	Prostate	Thyroid
12659	39147	R51636	148.86	1173.53	7.88	0.00	0.00	1	283.34	Umbilical cord Pool	Foreskin
12651	791023	AA418728	21.70	255.92	11.79	1.00	0.00	9	358.65	Brain	Testis
12653	44154	H08154	10.97	59.93	5.48	1.00	0.00	18	76.13	Adipose	Whole embryo/Kidney
12687	39365	R51871	85.00	682.13	6.97	2.00	0.00			Pancreas	Pancreas
12688	1452428	AA878576	17.62	186.98	9.48	0.00	0.00			Pool	LID not found
12689	787843	AA418743	21.49	190.97	8.89	1.00	0.00			Parathyroid	LID not found
12682	415042	W63106	5.60	28.15	5.21	0.00	0.00			Pool	LID not found
12683	262251	AA401376	3.93	47.89	12.13	3.00	0.00			CNS	Aorta
12692	343381	W87193	36.73	269.53	7.34	0.00	2.00	6	49.89	Heart	LID not found
12694	504959	AA149051	17.89	264.79	14.80	2.00	0.00	11	343.85	Aorta	Uterus
12708	610863	AA172188	13.40	97.79	7.30	0.00	0.00	5	527.16	Neural	Thyroid
12715	281970	N48181	108.13	620.25	5.84	2.00	2.00	7	443.2	CNS	LID not found
12732	342497	W65265	6.58	75.47	11.46	1.00	0.00			Heart	Tonsil
12734	593164	AA159600	73.48	401.27	5.40	1.00	0.00	5	527.79	Nose	Esophagus
12742	851091	AA620468	22.43	115.93	5.17	0.00	1.00	1	131.82	Liver	CNS
12746	340569	W69435	6.28	43.64	6.95	0.00	2.00			Heart	LID not found
12754	564771	AA136551	47.43	241.38	5.09	0.00	1.00	10	45	Aorta	Foreskin
12760	349930	W69774	9.59	220.63	23.01	1.00	0.00			Lung	Prostate
12762	359599	W94247	8.40	63.02	9.88	3.00	2.00	19	103.66	Heart	LID not found
12762	838761	AA457570	7.48	48.22	8.57	1.00	1.00			Peripheral nerve	Brain
12769	491712	AA150459	7.19	42.95	5.97	1.00	0.00	2	515.69	Ear	Uterus
12771	253241	H85293	23.89	182.85	7.68	3.00	0.00			Bone	Colon
12782	795284	AA454016	5.64	30.64	5.44	1.00	0.00			Colon	Testis
12783	324154	W46532	854.32	6022.68	7.05	2.00	0.00	1	209.39	Skin	Pool
12784	244300	N54783	180.84	1463.89	8.21	1.00	2.00			Tonsil	LID not found
12786	294915	N71463	84.98	822.10	9.87	3.00	3.00			Tonsil	LID not found
12786	263444	N63606	16.24	95.62	6.27	3.00	0.00			Pool	LID not found
12797	595238	AA173430	6.78	94.50	13.92	13.00	2.00			Esophagus	Synovial mem Thyroid
12800	841471	AA437241	117.25	1862.86	15.89	0.00	5.00			Lung	LID not found
12802	759271	AA423978	5.49	212.28	36.84	1.00	0.00	X	245.05	Germ Cell	Testis
12815	342027	W60283	453.49	3690.52	8.14	2.00	0.00	11	154.35	Parathyroid	Pooled Testis
12817	592771	AA158234	5.12	42.33	8.27	2.00	0.00			Pancreas	Colon

Table 2A

12824	365085	AA024604	20.32	123.90	5.06	1.00	0.00	459.89	Parathyroid	Breast	Whole embryo
12828	896070	AA589778	14.30	83.74	5.86	2.00	0.00	21.48	Pooled	Gall bladder	CNS
12829	813070	AA181846	10.60	52.70	5.02	0.00	1.00		Cervix	Pool	LID not found
12833	591253	AA160780	43.19	237.06	5.61	0.00	1.00		Pancreas	LID not found	Other
12836	730172	AA436009	5.11	25.75	5.04	1.00	0.00		Testis	LID not found	Other
12840	210952	H686005	20.97	203.41	9.70	0.00	2.00		Pool	LID not found	Other
12841	526939	AA159562	4.00	28.45	6.57	1.00	0.00		Germ Cell	Pancreas	Testis
12858	773160	AA425665	301.81	2179.31	7.22	0.00	2.00		59.14 Whole embryo	Brain	LID not found
12861	625863	AA187641	28.78	381.61	13.26	0.00	0.00		174.53 Small intestine	Germ Cell	Stomach
12862	795230	AA453598	2.51	17.74	7.08	2.00	0.00		Testis	Pool	Whole embryo
12863	346119	W72749	8.06	111.80	13.89	4.00	4.00		Heart	LID not found	Other
12866	780938	AA429804	17.60	277.80	15.78	2.00	0.00		682 Testis	LID not found	Other
12868	122782	T98719	1.12	5.87	5.07	1.00	0.00		350.76 Germ Cell	Pool	LID not found
12872	753028	AA436456	5.50	39.79	7.23	4.00	0.00		Pool	Uterus	Brain
12876	496811	AA456975	49.82	588.03	11.76	1.00	0.00		726.84 Periph. ner	Adipose	Breast
12882	781482	AA432121	148.79	798.58	5.35	1.00	0.00		726.94		
12883	786037	AA446837	21.36	139.88	6.55	2.00	0.00		Cervix	Umbilical cord	Ovary
12889	250868	N23589	47.56	282.69	5.52	0.00	2.00		59.6 Foreskin	LID not found	Other
12900	128611	R10099	51.07	280.36	5.10	1.00	0.00		Pool	LID not found	Other
12908	196187	R81849	5.04	34.28	6.80	5.00	0.00		288.35 Testis	Pool	LID not found
12910	950596	AA508532	8.17	46.14	5.03	1.00	0.00		Uterus	Lung	Pool
12913	254549	N23867	146.51	1355.51	9.25	2.00	0.00		Nose	LID not found	Other
12914	782270	AA431736	4.74	35.69	7.53	1.00	0.00		Testis	LID not found	Other
12924	126480	R06818	17.70	108.45	6.13	1.00	0.00		Whole embryo	Pool	LID not found
12935	43729	H05195	58.56	305.94	5.29	0.00	1.00		840.65 CNS	Heart	Bone
12936	753113	AA400710	3.73	26.59	7.13	1.00	3.00		Uterus	Whole embryo	Pool
12939	795903	AA461486	346.68	2323.93	6.70	1.00	2.00		245.31 Colon	Pool	LID not found
12955	35481	R45592	5.81	830.35	142.87	5.00	1.00		438.11 Brain	Eye	Breast
12958	743441	AA509564	24.34	273.37	11.23	4.00	5.00		Testis	LID not found	Other
12964	1409509	AA688929	11.28	109.06	9.66	4.00	2.00		305.11 Omentum	Muscle	
12965	813284	R42182	95.52	514.37	10.71	0.00	1.00		368.46 Uterus	Foreskin	Pool
12966	39580	N24955	2.66	16.09	5.38	4.00	0.00		15.73 Esophagus	Piaorta	Cervix
12968	267420	AA454085	4.29	26.53	6.18	1.00	0.00		16.86 Stomach	Prostate	Foreskin
12970	788246	AA454085	4.73	52.97	11.20	4.00	0.00		Whole embryo	LID not found	Other
12973	813286	AA455934	4.73	52.97	11.20	4.00	1.00		Larynx	Esophagus	Blood
12976	267725	N25578	48.57	308.82	6.63	2.00	0.00		Bone	Liver	Adrenal gland
12983	809998	AA454654	11.58	1193.03	103.05	12.00	0.00		305.09		
12986	768309	AA450020	43.46	250.49	5.51	0.00	1.00		158.84 Thyroid	Ovary	Acro
12988	1160618	AA877618	8.75	64.58	7.38	3.00	0.00		143.55 Colon	Testis	Prostate
12990	31195	R41911	3.70	21.94	5.79	2.00	0.00		278.61 Adipose	Gall bladder	Blood
12996	1160723	AA877845	23.91	166.20	7.82	3.00	0.00		89.05 Gall bladder	Stomach	Piaorta
13008	290841	N71882	54.58	395.10	7.24	2.00	1.00		116.78 Thyroid	Foreskin	Gall bladder
13010	788355	AA453028	13.17	75.98	5.77	1.00	0.00		Lymph	Germ Cell	Tonsil
13012	1159963	AA877255	12.77	74.46	5.63	1.00	0.00		Ovary	Germ Cell	Lung
13020	1161013	AA877669	7.72	50.79	6.58	0.00	1.00		Pooled	Blood	Germ Cell
13028	24176	R39325	8.08	47.71	5.90	3.00	0.00		182.05 Adipose	Brain	Parathyroid
13032	256973	N32804	12.88	83.05	6.45	3.00	0.00		269.06 Pool	Whole embryo	Piaorta
13043	568375	AA253464	53.71	598.53	10.96	0.00	1.00		316.05 Stomach	Uterus	
13045	813414	AA456046	4.82	30.96	8.29	2.00	1.00		Pool	LID not found	Other
13048	31281	R42864	16.93	119.56	7.06	1.00	0.00		260.52 Bone	Brain	LID not found
13047	626987	AA190871	6.10	34.82	5.68	1.00	0.00		719.37 Cervix	LID not found	Other
13048	276592	N39229	41.72	268.76	6.39	1.00	0.00		194.76	Adrenal gland	CNS
13049	811895	AA454982	8.25	68.92	7.56	0.00	1.00		307.02 CNS	Uterus	Whole embryo
13051	889379	AA236798	12.50	64.40	5.15	1.00	0.00		Thyroid	Cervix	Lymph
13054	31475	R42871	2.16	15.53	7.14	1.00	0.00		477.68 Testis	Brain	LID not found

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13605	627211	AA195398	15.59	130.75	8.39	0.00	2.00	1	689.77	Ignore	Umbilical cord	Bone
13617	593690	AA196695	15.64	91.96	5.86	1.00	0.00	10	415.26	Aorta	Ovary	Lung
13627	297930	N69982	207.98	1066.14	5.13	1.00	0.00	10	415.26	Ignore	Cervix	Lung
13629	626851	AA191437	46.43	320.60	6.91	0.00	2.00	11	282.9	Forebrain	LID not found	Other
13632	240223	H89505	121.48	1329.27	10.94	0.00	4.00	11	282.9	Testis	LID not found	Other
13633	269831	N24629	29.55	208.24	7.05	0.00	3.00	13	226.98	Popl	LID not found	Other
13638	743596	AA609422	17.04	97.59	5.73	1.00	0.00	10	104.49	Synovial men	Skin	Germ Cell
13639	811943	AA155012	3.47	78.84	22.73	7.00	2.00	10	104.49	Forebrain	Pool	LID not found
13640	763188	AA106348	12.53	92.49	7.38	1.00	0.00	7	675.52	CNS	Pool	LID not found
13641	267085	N24848	0.76	4.02	5.30	0.00	0.00	10	384.62	Parathyroid	Breast	Pleocenta
13645	759058	N51682	7.47	216.16	28.85	7.00	0.00	10	438.89	Forebrain	LID not found	Other
13648	268892	N25920	9.58	134.88	14.18	3.00	2.00	10	117.99	Adipose	Ear	Forebrain
13655	796408	AA459944	8.00	40.35	8.72	2.00	0.00	6	117.99	CNS	Pool	Germ Cell
13656	767475	AA406373	14.78	77.18	5.22	1.00	0.00	3	714.15	Uterus	Brain	Pool
13667	767475	AA1194833	5.89	61.85	10.50	0.00	0.00	17	321.88	Stomach	Pool	Heart
13672	753252	AA43719	171.04	1259.80	7.37	1.00	0.00	1	553.91	Nose	Nose	Prostate
13681	255897	N27366	39.35	219.99	6.59	2.00	0.00	3	391.24	Adipose	Tonsil	Adrenal gland
13687	34842	R43755	10.30	78.88	7.66	0.00	1.00	11	319.19	Tonsil	Brain	Pool
13688	753278	AA411656	39.82	224.58	5.64	1.00	0.00	12	105.99	Whole embryo	LID not found	Other
13692	665082	AA194941	9.46	48.95	5.17	1.00	0.00	17	24.51	Ear	Germ Cell	Testis
13698	784050	AA43719	882.59	5090.11	5.18	0.00	1.00	17	615.42	Breast	Forebrain	Muscle
13698	753940	AA479108	44.48	281.64	6.33	0.00	1.00	4	615.42	Pancreas	Forebrain	LID not found
13707	44287	H08249	3.13	21.70	6.94	1.00	0.00	9	64.24	Ear	Cervix	Pool
13713	270662	N29817	13.80	92.80	6.82	0.00	2.00	4	615.42	Testis	LID not found	Other
13716	768097	AA424754	13.43	76.78	5.94	2.00	0.00	9	64.24	Synovial mem	Forebrain	Lymph
13726	744436	AA621224	1.95	10.63	5.44	2.00	0.00	2	500.78	Tonal	Blood	Kidney
13730	788507	AA452572	22.85	134.85	5.90	2.00	0.00	14	173.12	Thymus	Whole embryo	CNS
13732	1161830	AA476021	6.53	57.78	9.12	4.00	0.00	14	173.12	Adrenal gland	Brain	CNS
13738	278430	AA43284	10.23	78.18	7.64	1.00	0.00	14	173.12	Adrenal gland	Muscle	Pancreas
13740	33427	R44741	0.43	46.01	5.28	2.00	0.00	8	404.08	Pool	Brain	Pancreas
13748	34149	R44762	2.78	15.74	5.65	1.00	0.00	20	328.88	CNS	Forebrain	Whole embryo
13754	788524	AA452801	9.32	239.92	25.75	4.00	0.00	20	328.88	Muscle	Pancreas	Lung
13758	81881	AA256178	2.45	15.40	8.23	0.00	2.00	22	-13.35	Placenta	Parathyroid	CNS
13758	31759	R43008	24.45	201.16	8.23	0.00	2.00	22	-13.35	Larynx	Thyroid	Cervix
13762	788541	AA462816	35.18	344.68	9.80	1.00	2.00	18	287.82	Ignore	Forebrain	CNS
13770	788554	AA452822	178.95	917.74	5.13	1.00	0.00	10	362.35	Aorta	CNS	Ovary
13774	31972	R43020	16.56	91.50	5.52	0.00	2.00	10	362.35	Forebrain	Pool	Pancreas
13775	741988	AA402915	21.30	497.89	21.87	3.00	0.00	11	352.44	CNS	Whole embryo	Pool
13783	773367	AA426884	3.82	39.18	10.81	1.00	0.00	21	242.21	Small intestine	Stomach	Germ Cell
13786	789558	AA452824	16.81	145.97	8.88	0.00	1.00	21	242.21	Cervix	Liver	Adipose
13789	813513	AA465083	8.55	75.47	11.53	0.00	2.00	1	750.98	Skin	Placenta	Adrenal gland
13794	708575	AA452877	8.87	100.11	11.55	3.00	0.00	20	40.86	Umbilical cord	Pool	Kidney
13800	324492	W51794	16.27	254.33	15.63	1.00	2.00	3	56.14	Parathyroid	LID not found	Other
13801	811554	AA456635	13.44	61.61	6.07	0.00	1.00	1	750.98	Skin	Placenta	Adrenal gland
13804	844616	AA773594	78.03	664.97	8.41	2.00	0.00	20	40.86	Umbilical cord	Pool	Kidney
13809	346009	W72140	13.64	176.48	12.04	2.00	0.00	3	56.14	Parathyroid	LID not found	Other
13815	882522	AA678468	59.77	639.22	10.69	8.00	1.00	1	750.98	Skin	Placenta	Adrenal gland
13820	856450	AA173983	3.25	27.09	8.33	1.00	0.00	20	40.86	Umbilical cord	Pool	Kidney
13822	34578	R44396	12.13	63.65	5.27	1.00	0.00	3	56.14	Parathyroid	LID not found	Other
13823	843398	AA488383	4.57	30.17	6.80	2.00	0.00	1	750.98	Skin	Placenta	Adrenal gland
13828	593027	AA149117	45.23	334.46	7.38	2.00	0.00	3	56.14	Parathyroid	LID not found	Other
13832	320425	W04695	48.73	322.51	6.62	0.00	4.00	1	750.98	Skin	Placenta	Adrenal gland

Table 2A

13842	568466	AA152340	22.14	132.85	6.01	1.00	0.00	16	181.21	Stomach	Pooled	Blood
13848	322477	W16425	12.79	103.45	8.09	0.00	3.00			Parathyroid	LID not found	Other
13855	276661	N34533	52.25	323.77	8.20	0.00	2.00	16	202.63	CNS	LID not found	Other
13860	299459	W78133	10.20	58.41	5.69	0.00	1.00			Heart	Whole embryo	Lung
13860	327480	V220462	2.66	63.68	23.65	5.00	0.00			Pooled	Kidney	Heart
13882	118049	T92200	209.53	1879.75	8.97	2.00	0.00	X	245.08	Lung	Pool	LID not found
13884	300000	N78888	87.83	693.56	7.76	0.00	2.00			Prostate	Lung	LID not found
13886	365508	AA189281	14.23	96.83	6.79	0.00	1.00	17	41.65	Cervix	Uterus	Kidney
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Heart	Colon	Kidney
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Heart	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	6	522.76	Pool	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	12	277.67	Pooled	Placenta	Lung
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	3	537.66	Nose	Skin	Breast
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Pool	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Testis	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Eye	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	1	88.45	Eye	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Uterus	Pool	LID not found
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Uterus	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Eye	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	5	504.31	Eye	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Eye	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	15	347.98	Uterus	Pool	LID not found
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	4	646.75	Uterus	Pool	LID not found
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	12	101.74	Synovial mem	Foramen	CNS
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	X	76.07	Uterus	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	10	62.53	Pool	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Lymph	Uterus	Kidney
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	15	164.8	Colon	Kidney	LID not found
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	10	426.78	Head and nec	Ear	Pancreas
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	5	529.13	Spleen	Tonsil	Ovary
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	9	121.06	Whole embryo	Colon	Pool
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	22	71.14	Ovary	Colon	Lung
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	15	240.37	Ovary	Heart	Lung
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	16	162.07	Ovary	Heart	Lung
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	3	575.4	Esophagus	Adipose	Gall bladder
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	18	315.2	Eye	Spleen	Brain
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Testis	Umbilical cord	Ear
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	3	459.05	Parathyroid	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	1	126.05	Brain	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	2	743.9	Lung	Pool	Brain
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	12	229.98	Brain	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Testis	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Testis	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	6	495.58	Pool	Lung	LID not found
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	3	455.09	Brain	LID not found	Other
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00	2	87.67	Adrenal gland	Forebrain	Placenta
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00			Cervix	Tonsil	Prostate
13894	327732	W23581	22.62	221.25	9.78	0.00	1.00					

Table 2A

14129	754552	AA408311	6.76	37.93	5.61	1.00	0.00	17	281.02	Lymph	Blood	Testis
14131	41869	R66438	2.46	39.09	13.90	2.00	0.00	4	188.31	Parathyroid	Pool	Prostate
14137	754555	AA408201	44.76	236.76	5.29	1.00	0.00	3	347.25	Bone	Pool	Germ Cell
14145	754591	AA406320	32.89	204.98	6.24	1.00	0.00	3	395.51	Liver	Pool	Pituitary
14158	141223A	AA404818	7.69	392.52	51.11	9.00	0.00	7	592.03	Salivary gland	Pituitary	Ear
14164	1412245	AA404453	4.94	164.95	33.42	2.00	0.00	7	592.03	Pituitary	Pool	LID not found
14169	754553	AA411204	4.06	27.03	8.66	0.00	2.00	2	241.71	Pituitary	Pool	LID not found
14172	1412300	AA404864	3.49	87.84	26.19	2.00	0.00	15	323.47	CNS	Pool	Whole embryo
14174	754590	AA409362	89.12	457.43	5.13	1.00	0.00	15	323.47	CNS	Pool	Whole embryo
14177	754654	AA411807	0.75	15.53	20.78	3.00	0.00	3	145.08	Brain	LID not found	Eye
14190	755910	AA404941	10.64	216.84	20.39	0.00	3.00	2	-12.44	Brain	LID not found	Other
14191	46887	H18098	15.52	103.43	6.66	2.00	0.00	2	-12.44	Brain	LID not found	Other
14193	41913	R59608	1.02	7.88	7.72	2.00	0.00	3	410.63	Breast	Brain	LID not found
14198	755913	AA409490	20.80	104.27	5.01	1.00	1.00	3	410.63	Breast	Brain	LID not found
14199	46810	H16179	1.79	29.99	16.80	0.00	0.00	9	357.99	Heart	Muscle	Whole embryo
14205	768254	AA424944	81.52	487.39	5.73	0.00	2.00	2	868.82	Bone	Umbilical cord	Aorta
14207	48055	H16725	218.35	1424.49	6.52	0.00	3.00	7	504.11	Brain	Heart	LID not found
14208	468432	AA777551	1.24	9.59	7.71	2.00	0.00	7	504.11	Brain	Heart	LID not found
14222	587333	AA132867	155.88	1414.68	9.08	2.00	0.00	X	83.98	Ear	Heart	Whole embryo
14232	350072	V62315	178.96	1345.43	7.60	2.00	0.00	X	83.98	Ear	Heart	Whole embryo
14235	840728	AA487848	287.87	3930.50	13.20	1.00	0.00	10	374.69	Eye	Pool	LID not found
14238	344959	W72870	7.12	43.30	6.08	1.00	0.00	3	200.65	Eye	Pool	Muscle
14238	564847	AA129217	6.18	71.52	11.61	1.00	0.00	22	37.19	Heart	CNS	LID not found
14238	897865	AA588840	11.91	83.68	7.87	1.00	1.00	15	180.28	Eye	Pool	LID not found
14242	897865	AA588840	11.91	83.68	7.87	1.00	1.00	15	180.28	Eye	Pool	LID not found
14244	349116	W72920	4.98	35.24	7.07	1.00	0.00	15	180.28	Eye	Pool	LID not found
14251	280496	N51595	102.34	542.72	5.30	0.00	1.00	10	374.69	Eye	Pool	LID not found
14254	838989	AA487287	162.86	1473.86	7.64	2.00	3.00	3	200.65	Eye	Pool	Muscle
14270	784154	AA432096	0.71	6.76	9.54	2.00	0.00	22	37.19	Heart	CNS	LID not found
14274	730408	AA469954	27.95	179.30	6.41	2.00	0.00	15	180.28	Eye	Pool	LID not found
14285	278144	N63516	11.24	59.22	5.27	0.00	1.00	15	180.28	Eye	Pool	LID not found
14299	263581	N50702	5.77	131.13	22.72	1.00	0.00	15	180.28	Eye	Pool	LID not found
14300	344550	W73597	167.79	1041.92	6.21	1.00	0.00	15	180.28	Eye	Pool	LID not found
14304	427754	AA022226	35.43	189.93	5.36	2.00	1.00	15	180.28	Eye	Pool	LID not found
14307	291947	N73063	0.78	8.81	11.25	1.00	0.00	15	180.28	Eye	Pool	LID not found
14316	122008	T88355	20.15	102.07	5.07	0.00	1.00	15	180.28	Eye	Pool	LID not found
14322	780944	AA429807	6.11	44.05	7.21	0.00	1.00	15	180.28	Eye	Pool	LID not found
14324	122435	T95243	7.85	48.95	6.16	2.00	0.00	15	180.28	Eye	Pool	LID not found
14325	757246	AA428028	10.05	103.98	10.37	0.00	3.00	4	349.85	Eye	Pool	Testis
14326	636230	AA458874	33.42	182.36	5.46	1.00	0.00	15	14.4	Pool	LID not found	Other
14328	241447	H90407	32.70	301.43	9.22	0.00	5.00	22	88	Nose	LID not found	Other
14331	255651	N27837	218.53	1509.71	6.88	3.00	0.00	22	88	Nose	LID not found	Other
14334	810984	AA459403	272.32	1472.70	5.41	0.00	3.00	22	88	Nose	LID not found	Other
14337	608521	AA167585	91.21	967.23	10.60	0.00	5.00	22	88	Nose	LID not found	Other
14342	783534	AA459649	11.43	66.92	5.85	0.00	1.00	5	57.43	Eye	Pool	LID not found
14345	608520	AA167589	57.11	556.26	9.74	0.00	3.00	19	250.6	Testis	LID not found	Other
14350	785580	AA459689	15.24	82.28	5.40	0.00	2.00	20	120.04	Colon	Lung	LID not found
14352	586845	AA133554	1.28	12.93	10.13	3.00	0.00	20	120.04	Colon	Lung	LID not found
14353	810006	AA169173	7.02	51.88	7.39	3.00	0.00	X	121.77	Stomach	Testis	Brain
14355	434553	AA047275	34.00	231.09	6.81	2.00	0.00	X	121.77	Stomach	Testis	Brain
14358	126540	R06754	138.48	920.17	6.74	0.00	2.00	21	154.34	Neural	Brain	Eye
14360	347740	W81524	25.71	153.68	5.98	0.00	3.00	21	154.34	Neural	Brain	Eye
14367	429122	AA004803	6.43	41.25	6.41	1.00	0.00	X	245.06	Testis	LID not found	Other
14374	795794	AA459351	161.02	921.82	5.72	1.00	0.00	X	245.06	Testis	LID not found	Other
14381	629701	AA218673	134.33	845.72	6.11	1.00	0.00	21	154.34	Neural	Brain	Eye
14384	744560	AA621183	9.34	51.28	6.56	0.00	1.00	21	154.34	Neural	Brain	Eye

Table 2A

14389	62885	AA319047	374.87	2285.82	6.04	1.00	1.00	3	597.77	Eye	LID not found Other
14395	244050	R83402	1.92	23.21	12.07	4.00	0.00	2	75.2	Pool	LID not found Other
14396	187102	R83408	5.52	34.05	6.17	1.00	0.00	2	75.2	Pool	LID not found Other
14397	628007	AA219230	56.06	346.97	6.19	1.00	2.00	1	589.13	Eye	Gall bladder Adrenal gland
14401	237170	N53537	276.83	1691.08	6.03	0.00	2.00	1	589.13	Nose	LID not found Other
14421	283519	N52876	5.94	31.91	5.76	1.00	0.00	1	589.13	CNS	LID not found Other
14422	744611	AA621294	5.12	28.38	5.15	1.00	0.00	1	589.13	Testis	Heart
14428	665316	AA195318	48.96	282.39	5.77	1.00	0.00	1	589.13	Colon	LID not found Other
14431	811907	AA454654	5.76	71.10	12.34	5.00	0.00	8	477.99	Larynx	Skin
14434	795376	AA453484	26.62	163.18	6.37	0.00	2.00	8	477.99	Testis	Umbilical cord
14435	753933	AA478596	22.78	163.14	6.04	2.00	0.00	8	477.99	CNS	LID not found Other
14437	812074	N52935	6.72	32.83	5.74	1.00	0.00	8	477.99	Brain	Pancreas
14439	812074	AA455988	4.75	98.82	20.82	5.00	1.00	6	19.39	Pancreas	Liver
14440	753376	AA411685	6.07	107.04	17.94	8.00	1.00	6	19.39	Brain	Ovary
14444	665379	AA194893	8.93	53.68	6.01	1.00	0.00	6	19.39	CNS	Tonsil
14445	283888	N52938	185.50	830.04	5.02	1.00	0.00	6	19.39	CNS	LID not found Other
14446	199935	R95322	9.36	132.05	14.11	0.00	1.00	9	355.78	CNS	Pool
14463	33529	R45517	7.80	45.36	5.76	1.00	0.00	19	247.58	Placenta	Aorta
14465	243477	N53610	4.20	21.75	5.18	1.00	0.00	5	527.16	Neural	Thyroid
14466	811803	AA454816	110.50	685.02	6.02	1.00	0.00	10	372.38	Pool	LID not found Other
14467	762836	AA418603	104.16	731.42	7.02	0.00	2.00	15	116.58	Thyroid	Pool
14474	809863	AA455130	6.71	82.04	12.22	2.00	0.00	3	20.26	Thymus	LID not found Other
14476	665446	AA195080	38.85	203.49	5.26	1.00	0.00	4	460.16	Pool	LID not found Other
14477	247265	N54061	32.56	190.33	5.65	0.00	3.00	4	460.16	Pool	LID not found Other
14480	753596	AA478717	9.78	72.82	7.45	1.00	3.00	11	271.39	Eye	Head and nec Brain
14486	731469	AA412417	10.58	76.87	7.53	3.00	0.00	3	472.27	Brain	Blood
14490	838776	AA457576	0.91	4.90	5.40	2.00	0.00	1	628	Pod	Prostate
14491	34869	R44447	1.53	15.24	9.96	1.00	1.00	1	628	Pod	LID not found Other
14493	247898	N54274	489.06	2822.84	5.65	1.00	1.00	4	536.11	Pooled	Germ Cell
14495	37623	R59473	0.86	7.17	8.15	2.00	0.00	8	470.89	Uterus	Brain
14498	748841	AA448832	6.34	105.02	12.58	3.00	0.00	7	84.72	Cervix	Umbilical cord Pooled
14499	682072	AA256484	22.68	156.78	6.91	0.00	4.00	7	84.72	Cervix	LID not found Other
14500	624744	AA187143	4.57	87.39	19.10	3.00	5.00	14	82.24	Brain	LID not found Other
14502	34745	R44409	3.15	140.68	44.8	5.00	0.00	10	250.29	Whole embryo	LID not found Other
14505	811883	AA455654	35.57	188.88	5.31	0.00	1.00	3	628.88	Adipose	Umbilical cord Pancreas
14506	786657	AA449847	9.99	68.23	8.83	1.00	0.00	3	628.88	Adipose	Brain
14508	625011	AA181023	9.30	735.73	79.13	22.00	3.00	7	675.52	Head and nec Esophagus	LID not found
14510	34898	R44428	3.74	24.36	6.52	1.00	0.00	7	675.52	Head and nec Esophagus	Pancreas
14511	897768	AA598507	3.33	24.03	7.22	3.00	0.00	22	37.18	Forebrain	Pancreas
14512	345077	W77310	13.03	115.35	8.66	1.00	0.00	20	325.54	Thymus	Bone
14522	796395	AA459949	26.52	173.44	6.54	0.00	3.00	9	422.75	Gall bladder	Spleen
14526	34901	R45114	29.48	358.01	12.07	2.00	0.00	X	141.37	Peripheral ner Tonsil	Colon
14528	366518	AA026605	32.72	192.07	5.87	1.00	0.00	4	562.82	Adipose	Gall bladder Breast
14529	812012	AA455882	6.67	52.07	7.81	1.00	0.00	21	217.43	Cervix	Forebrain Lymph
14539	377463	AA655440	34.43	282.70	8.21	1.00	1.00	5	626.75	Neural	Pooled Tonsil
14544	378855	AA778392	227.49	1482.41	6.52	1.00	0.00	2	294.33	CNS	Prostate
14545	378461	AA775816	21.01	1900.75	90.45	18.00	1.00	2	194.51	CNS	Blood
14552	378461	AA455880	8.86	56.85	6.41	3.00	0.00	2	194.51	CNS	Parathyroid
14563	812053	AA706301	8.78	43.53	8.42	1.00	0.00	2	194.51	CNS	Parathyroid
14560	1155071	AA709143	185.20	1387.94	8.40	0.00	2.00	2	194.51	CNS	Parathyroid
14564	385003	AA709143	185.20	1387.94	8.40	0.00	2.00	2	194.51	CNS	Parathyroid
14593	812069	AA455994	20.32	132.57	6.53	0.00	1.00	2	194.51	CNS	Parathyroid
14590	35100	R43798	24.85	256.12	10.30	5.00	1.00	2	194.51	CNS	Parathyroid
14590	594693	AA165313	13.11	78.61	5.98	1.00	0.00	2	194.51	CNS	Parathyroid
14618	797057	AA463249	234.02	1486.72	6.35	0.00	2.00	2	194.51	CNS	Parathyroid
14620	843251	AA488646	104.73	726.20	6.35	5.00	0.00	2	194.51	CNS	Parathyroid

Table 2A

14624	328287	W31919	7.82	216.57	27.71	1.00	2.00	Pancreas	LID not found Other
14628	784142	AA432081	200.65	1953.21	8.47	0.00	0.00	Esophagus	Parathyroid Whole embryo
14636	590924	AA608729	473.35	3028.61	6.40	1.00	0.00	246.56	Pool
14644	565110	AA128462	37.94	398.16	10.49	0.00	2.00	148.92	Lung
14654	480983	AA120666	19.59	428.06	21.76	9.00	0.00	Pool	Prostate
14659	784272	AA447476	21.78	111.38	6.11	1.00	0.00	Small intestine	LID not found Other
14662	593200	AA173411	31.84	193.81	8.09	1.00	0.00	86.66	Uterus
14666	119330	T84556	10.77	55.94	5.19	1.00	0.00	Lung	LID not found Other
14675	283780	N54165	243.53	1407.07	5.76	2.00	0.00	Ear	Forebrain
14676	757337	AA437099	5.07	45.88	7.82	2.00	0.00	173.27	CNS
14684	272552	N35894	306.13	1783.62	5.72	1.00	1.00	243.66	Parathyroid
14686	568501	AA151917	27.87	140.21	5.91	0.00	1.00	123.62	Aorta
14687	277083	N35603	24.91	132.81	5.33	1.00	0.00	546.25	CNS
14688	327033	W37633	18.28	93.04	5.09	0.00	1.00	530.53	Parathyroid
14698	121580	T97821	48.78	449.24	9.21	0.00	2.00	Testis	LID not found Other
14702	730742	AA435988	5.55	33.55	8.05	1.00	0.00	Prostate	Uterus
14704	757205	AA443978	15.48	179.89	11.62	4.00	0.00	Lung	LID not found Other
14715	489109	AA056484	33.07	172.99	6.23	0.00	0.00	Lung	LID not found Other
14719	840470	AA485859	8.16	45.03	7.32	2.00	0.00	Colon	LID not found Other
14727	840514	AA485859	154.76	1177.04	7.81	2.00	0.00	330.19	CNS
14729	510397	AA053682	24.74	130.91	5.29	2.00	0.00	Cervix	Forebrain
14731	897722	AA059583	9.99	65.30	6.54	1.00	0.00	Testis	Testis
14735	843058	AA486604	4.62	61.72	13.36	6.00	0.00	Cervix	Brain
14738	117355	T91098	8.14	59.84	7.35	1.00	0.00	CNS	Whole embryo
14743	843278	AA486859	16.07	133.96	8.89	2.00	3.00	654.24	CNS
14749	584898	AA120318	8.82	49.54	5.62	0.00	1.00	277.15	Cervix
14755	594946	AA172039	23.27	150.86	6.48	0.00	1.00	327.49	Skin
14760	147834	R61631	45.68	337.10	7.36	4.00	0.00	Testis	Pool
14766	731445	AA412443	4.24	45.21	10.65	2.00	0.00	Adipose	Whole embryo
14770	798227	AA460688	9.46	56.30	5.96	0.00	1.00	Neural	Eye
14772	839037	AA487501	20.39	289.95	14.22	4.00	5.00	22.82	Pancreas
14773	528567	AA128407	3.24	75.63	23.42	8.00	0.00	149.53	Lung
14775	841016	AA468658	25.12	128.29	5.11	1.00	0.00	719.04	Colon
14784	122872	R00130	177.91	1531.72	8.61	1.00	2.00	Testis	LID not found Other
14793	1031580	AA609310	42.09	239.36	5.69	1.00	0.00	Muscle	LID not found Other
14794	327746	W23441	50.53	342.75	6.76	0.00	4.00	347.4	Heart
14797	120548	R06890	240.13	1258.06	5.24	1.00	0.00	163.751	Pool
14802	321310	W32192	12.17	62.64	6.15	0.00	1.00	Parathyroid	LID not found Other
14808	352685	R45579	83.13	333.15	5.28	0.00	1.00	Adipose	Brain
14810	324111	W46575	89.82	540.10	7.76	0.00	2.00	LID not found Other	LID not found Other
14813	127192	R03260	30.57	211.52	6.92	0.00	3.00	385.82	Pool
14814	287865	N25657	171.67	1025.19	5.97	0.00	2.00	110.93	Small intestine
14816	373857	R49650	4.06	26.62	6.55	1.00	0.00	Brain	Gall bladder
14817	244959	N54825	207.89	1211.40	5.83	0.00	2.00	Pool	LID not found Other
14818	340737	W56308	211.56	1740.75	8.23	0.00	2.00	151.92	Forebrain
14819	1030855	AA621761	73.00	963.30	13.20	2.00	1.00	Testis	LID not found Other
14824	44156	R08157	2.53	22.90	9.06	2.00	0.00	21.19	Brain
14825	265845	R25338	300.18	2126.96	7.09	2.00	0.00	Forebrain	LID not found Other
14826	133847	R27619	7.30	81.73	11.20	1.00	0.00	940.93	Parathyroid
14832	31584	R42058	10.96	354.13	32.25	2.00	0.00	96	Parathyroid
14833	276387	R40180	8.17	45.40	5.55	1.00	0.00	CNS	Brain
14837	129777	R16983	73.32	449.88	6.14	0.00	1.00	LID not found Other	LID not found Other
14840	37814	R59355	3.76	22.23	5.91	1.00	0.00	88.95	Brain
14842	339179	W60473	7.04	70.96	10.03	6.00	0.00	Pool	Germ Cell
14845	130392	R21741	175.15	2085.40	11.93	0.00	2.00	Placenta	LID not found Other

Table 2A

14846	278137	N63520	15.76	89.85	5.70	0.00	1.00	CNS	LID not found Other
14851	1030959	AA620359	6.27	43.04	6.86	1.00	0.00	Testis	LID not found Other
14852	115277	T66932	8.24	101.29	12.25	0.00	1.00	Pancreas	Whole embryo
14858	343174	W67598	7.95	67.51	8.94	7.00	0.00	Uterus	Heart
14866	343235	W67368	545.65	4144.44	7.60	2.00	0.00	Testis	Pool
14867	1040168	AA620686	7.76	69.08	8.90	0.00	1.00	Testis	LID not found Other
14872	38887	R51514	2.01	18.57	8.24	3.00	0.00	Brain	Testis
14876	785994	AA449321	8.14	59.24	6.48	1.00	0.00	Whole embryo/Heart	Pool
14878	281659	N48050	8.44	62.82	7.44	1.00	0.00	Stomach	Germ Cell
14902	786953	AA446653	10.04	59.29	5.90	0.00	0.00	Thyroid	Testis
14904	450574	AA704255	5.74	35.34	5.15	0.00	0.00	Gall bladder	Pool
14906	765995	AA398385	25.86	179.72	6.86	1.00	0.00	CNS	Testis
14907	42302	R61700	114.02	596.02	5.23	1.00	0.00	Brain	LID not found Other
14912	451504	AA4707321	55.57	386.48	6.60	2.00	0.00	Pool	Colon
14913	787113	AA424537	12.07	124.06	10.28	0.00	2.00	Marrow	LID not found
14916	1416782	AA689457	33.84	495.07	14.59	4.00	2.00	Parathyroid	Esophagus
14921	787126	AA424534	7.93	41.85	5.28	0.00	1.00	Esophagus	Synovial mem Ovary
14924	1434948	AA857131	37.40	224.00	5.88	2.00	0.00	Testis	Brain
14928	452568	AA778919	2.59	16.03	8.19	3.00	0.00	Brain	Colon
14930	726708	AA393287	3.56	21.44	8.02	2.00	0.00	Brain	LID not found Other
14931	42330	R61187	34.27	171.71	6.01	1.00	0.00	Larynx	Blood
14932	1434905	AA857101	4.95	280.19	56.58	10.00	0.00	Testis	Brain
14935	647444	AA195868	39.81	272.37	7.02	2.00	0.00	Testis	LID not found
14947	42680	R61231	2.54	14.11	5.56	1.00	0.00	Brain	LID not found Other
14955	42452	R61297	968.79	3511.35	5.25	1.00	0.00	Adipose	Foreskin
14957	786417	AA495535	10.49	88.32	6.32	0.00	1.00	Muscle	Whole embryo/Pool
14958	786154	AA448855	3.25	18.48	5.08	0.00	1.00	Lung	Placenta
14958	482585	AA705112	9.99	88.27	8.94	2.00	0.00	Testis	LID not found Other
14959	787176	AA424562	11.40	105.55	9.20	4.00	0.00	Testis	Ovary
14970	726731	AA396235	127.87	878.81	6.88	2.00	0.00	Testis	LID not found Other
14982	345781	W72871	5.80	43.08	7.43	3.00	0.00	Germ Cell	Prostate
14984	427677	AA001879	200.05	1430.28	7.15	2.00	0.00	Pool	LID not found Other
14987	233744	N50740	9.51	57.47	6.05	1.00	0.00	CNS	Prostate
14996	346366	W72257	24.68	156.07	6.32	0.00	2.00	Heart	Testis
14998	898050	AA588947	265.59	1540.53	5.80	1.00	0.00	Heart	Whole embryo/Ovary
15004	338217	W95836	11.19	145.78	13.03	3.00	0.00	Germ Cell	Uterus
15011	281934	N51086	11.16	118.87	10.63	1.00	0.00	Heart	LID not found Other
15012	346523	W73994	6.08	33.18	5.46	0.00	1.00	Heart	LID not found Other
15016	427897	AA001824	15.98	118.08	7.42	4.00	0.00	Pool	LID not found Other
15038	217784	H88891	321.40	1984.75	6.12	2.00	1.00	CNS	LID not found Other
15039	277871	N84198	30.02	151.32	5.04	0.00	1.00	Smooth muscle	Germ Cell
15040	784183	AA446661	21.18	207.35	9.40	0.00	1.00	Smooth muscle	Whole embryo
15048	255295	N23717	947.64	6391.17	6.74	1.00	0.00	Nose	LID not found Other
15048	428592	AA004887	5.52	44.94	8.14	2.00	0.00	Pool	LID not found Other
15055	839527	AA491457	3.26	19.72	6.05	1.00	0.00	Eye	Ear
15073	594053	AA169840	36.84	185.56	6.04	0.00	1.00	Ovary	LID not found Other
15084	591814	AA143467	21.11	117.03	5.54	2.00	0.00	Pancreas	Colon
15085	829994	AA219172	31.32	237.88	7.80	0.00	2.00	Eye	LID not found Other
15087	213494	H72232	713.96	3660.65	5.13	1.00	0.00	Pool	LID not found
15101	838853	AA481788	88.62	728.33	8.23	2.00	0.00	Tonsil	Colon
15113	594884	AA171760	8.39	168.58	19.83	16.00	2.00	Stomach	Pancreas
15114	782171	AA431210	6.49	32.60	5.02	0.00	1.00	Testis	LID not found Other
15121	594758	AA172056	19.89	233.32	11.73	3.00	0.00	Cervix	Ovary
15133	746605	AA621281	10.20	61.19	6.00	1.00	0.00	Cervix	Testis
15140	213682	H72279	22.29	184.56	8.28	2.00	0.00	Testis	Breast

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15142	795857	AA460147	9.82	51.11	5.20	1.00	0.00	1	Testis	LID not found	Other
15143	343711	W71894	18.21	123.62	6.79	0.00	0.00	1	27.1 Synovial mem	Pooled	Breast
15147	290227	N62271	96.33	506.21	5.86	2.00	0.00	1	CNS	Tonsil	LID not found
15153	609560	AA174106	5.49	30.43	5.64	2.00	0.00	7	Eye	LID not found	Other
15154	782489	AA431771	82.94	340.33	5.41	1.00	0.00	7	Testis	LID not found	Other
15155	288951	N62712	27.25	139.37	5.11	1.00	0.00	7	424.67 CNS	LID not found	Other
15156	566440	AA148862	21.49	150.53	7.01	2.00	0.00	12	487.5 Stomach	Uterus	Muscle
15165	836476	AA437517	36.05	285.86	7.93	2.00	0.00	6	437.97 Salivary gland	Adipose	CNS
15167	891422	AA489463	24.33	173.86	7.15	0.00	1.00	4	85.75 CNS	Spleen	Lung
15171	27404	R40031	3.13	16.95	5.42	2.00	0.00	7	872.07 Germ Cell	Eye	Pool
15176	753828	AA479852	11.24	57.94	5.15	1.00	0.00	18	86.81 Pooled	Foreskin	Pool
15182	786328	AA461317	128.49	683.48	5.32	0.00	1.00	X	245.06 CNS	Whole embryo/LID not found	
15190	814268	AA485993	8.16	43.55	5.32	1.00	0.00	1	15.07 Neural	Pooled	Placenta
15191	733398	AA410345	16.00	95.86	5.37	1.00	0.00	5	337.25 Spleen	Pancreas	Kidney
15205	245803	N55391	140.20	742.30	5.29	1.00	0.00	5	337.25 Spleen	CNS	Tonsil
15208	733884	AA408659	17.20	93.81	6.45	0.00	1.00	11	339.35 Placenta	Parathyroid	Foreskin
15215	813169	AA456318	14.56	80.68	5.54	1.00	0.00	8	Muscle	Kidney	Pool
15223	732625	AA419608	24.86	180.85	7.27	1.00	1.00	8	65.2 Parathyroid	Nose	CNS
15225	213347	N38960	27.02	192.04	7.11	0.00	1.00	14	179.2 Pool	LID not found	Other
15229	277327	N57483	1.22	7.21	6.93	1.00	0.00	21	184.67 CNS	LID not found	Other
15231	767082	AA424511	7.92	44.22	5.58	0.00	1.00	1	Pool	LID not found	Other
15241	277039	N39577	54.60	328.80	6.04	0.00	3.00	17	CNS	LID not found	Other
15243	665385	AA195021	95.28	280.51	5.07	0.00	1.00	17	403.8 Pancreas	Cervix	Unilateral cord
15247	726483	AA398269	38.53	317.18	8.23	0.00	1.00	17	Uterus	Pool	LID not found
15281	247177	N57906	14.34	133.20	9.29	1.00	1.00	17	Pool	LID not found	Other
15282	798155	AA461090	200.57	1105.18	5.51	2.00	2.00	4	Whole embryo/LID not found	Other	
15285	812098	AA466001	7.45	88.03	11.86	0.00	0.00	4	Kidney	Germ Cell	Ovary
15298	187814	R83757	9.04	76.31	8.44	3.00	0.00	16	623.42 Unilateral cord	Germ Cell	Foreskin
15299	1091643	AA399311	325.95	2095.08	6.43	2.00	0.00	16	348.34 Skin	Cervix	Bone
15294	35147	R45550	10.64	67.12	6.14	0.00	1.00	2	554.03 Brain	LID not found	Other
15317	813719	AA453779	12.45	1484.63	117.83	11.00	0.00	X	246.7 Brain	Heart	Testis
15318	359512	R45627	242.87	1224.71	5.04	1.00	0.00	X	Pool	Lung	LID not found
15323	769421	AA466836	21.43	159.27	7.43	0.00	5.00	1	633.69 Lung	LID not found	Other
15334	35728	R45892	4.13	25.72	6.23	1.00	0.00	1	633.69 Lung	Brain	LID not found
15335	1469234	AA865729	11.33	137.74	12.15	1.00	0.00	X	83.98 Skin	Germ Cell	Colon
15337	812172	AA456036	8.01	50.35	6.29	1.00	0.00	X	Tonsil	Testis	Pool
15341	813748	AA438802	0.73	8.16	11.15	1.00	0.00	6	Foreskin	Pool	LID not found
15345	812175	AA456044	9.40	73.50	7.82	1.00	4.00	6	104.03	Foreskin	Pancreas
15348	214008	H70775	16.72	138.19	8.28	3.00	0.00	7	653.71	Cervix	Pancreas
15362	625348	AA188653	11.81	223.11	19.06	3.00	1.00	7	Foreskin	LID not found	Other
15363	268697	N22897	248.28	1302.54	5.25	2.00	0.00	1	174.53 Unilateral cord	Ear	Thymus
15372	300024	N76803	16.17	81.94	5.07	0.00	1.00	19	102.24 Parathyroid	LID not found	Other
15378	321958	W67753	122.09	1402.23	11.48	0.00	2.00	X	245.06 CNS	LID not found	Other
15386	289168	N88970	56.84	482.61	8.14	0.00	4.00	5	Lung	Tonsil	LID not found
15394	841670	AA487563	14.61	95.54	8.54	0.00	4.00	5	481.83 Lymph node	Head and nec	CNS
15402	627401	AA190825	6.03	115.96	19.22	5.00	0.00	19	157.02 Foreskin	Spleen	Heart
15403	254562	N23851	9.45	74.55	7.69	1.00	0.00	19	474.75	Whole embryo/LID not found	Adrenal gland
15404	291691	N73011	28.77	302.90	10.53	0.00	1.00	8	460.41 Placenta	CNS	Bone
15408	322926	W45025	480.32	2443.93	5.09	0.00	1.00	10	460.41 Placenta	CNS	Bone
15430	488469	AA047462	34.02	205.07	6.03	0.00	1.00	4	870.02 CNS	Larynx	Pancreas
15432	582711	AA159994	8.15	37.15	7.54	0.00	4.00	4	870.02 CNS	Pool	LID not found
15439	282475	N48850	31.28	235.84	7.54	0.00	4.00	4	870.02 CNS	Pool	LID not found
15440	332369	W42746	6.70	34.67	5.20	0.00	1.00	17	281.02 Nose	Ovary	Heart
15444	305481	N89812	9.73	54.67	5.62	0.00	1.00	17	281.02 Nose	Ovary	Heart
15451	254694	N25049	42.24	252.71	5.88	2.00	0.00	17	281.02 Nose	Ovary	Heart

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15455	290529	N85001	141.95	761.82	5.37	0.00	1.00	1	142.28	CNS	LID not found Other
15458	503583	AA131240	6.49	32.95	5.10	0.00	1.00	4	201.92	Adrenal gland	Whole embryo/Liver
15468	505098	AA589402	109.03	774.36	7.10	0.00	0.00			Colon	Pancreas Parathyroid
15470	731150	AA412497	27.98	416.52	14.89	0.00	2.00	2	96.76	Testis	LID not found Other
15471	839009	AA407301	60.06	665.29	7.49	0.00	0.00			Eye	LID not found Other
15472	155811	R33363	25.44	184.26	6.46	1.00	0.00	10	254.93	Uterus	Umbilical cord
15475	503875	AA131450	20.94	212.25	10.14	0.00	2.00			Aorta	LID not found
15477	505683	AA133395	5.88	59.87	10.14	0.00	0.00	16	22.68	Lung	LID not found Other
15481	509463	AA056383	205.97	1587.83	7.71	0.00	2.00	5	501.98	Colon	LID not found Other
15484	887773	AA588515	28.51	205.12	7.19	0.00	2.00			Kidney	LID not found Other
15487	344108	W73781	17.91	151.93	7.37	0.00	1.00	11	373.42	CNS	Heart
15503	839048	AA487505	9.38	69.52	7.41	0.00	0.00	X	245.06	Aorta	Forebrain Whole embryo
15511	328613	W45285	1.68	9.97	5.93	1.00	0.00	9	358.18	Parathyroid	Pancreas Eye
15531	591116	AA158352	136.20	1539.66	11.30	0.00	3.00			Pool	LID not found
15533	784216	AA448868	35.03	255.97	7.31	0.00	0.00	X	350.02	Adipose	Pancreas Blood
15538	208688	H60989	0.52	2.97	5.74	1.00	0.00			Whole embryo/Colon	LID not found
15547	593838	AA168743	10.24	75.63	7.42	0.00	1.00	18	247.79	Brain	Parathyroid Ovary
15568	505341	R81377	32.33	208.42	6.48	1.00	0.00			Forebrain	Brain Breast
15589	378711	N68399	28.25	228.05	8.11	1.00	1.00	8	117.63	Pool	LID not found Other
15570	347472	W81229	47.38	255.92	5.40	0.00	3.00			Kidney	Heart LID not found
15573	138281	R68013	133.58	803.60	6.02	0.00	0.00	1	174.53	Pituitary	LID not found Other
15577	201422	R90392	13.59	98.24	7.08	0.00	3.00			Pool	LID not found Other
15578	418309	W65185	23.56	125.82	5.34	1.00	0.00	6	137.8	Uterus	Testis Pool
15585	505341	AA158235	164.72	858.78	5.54	0.00	2.00	6	308.44	Germ Cell	LID not found Other
15592	30459	R42143	3.57	28.47	7.13	1.00	0.00			Brain	Testis Adrenal gland
15593	241705	H91680	81.33	576.35	7.09	1.00	0.00	20	309.22	Brain	Lung Breast
15590	44303	H03080	6.73	36.27	6.39	1.00	0.00	11	387.35	Pool	LID not found Other
15613	185938	R81401	835.50	4242.62	5.08	1.00	0.00			Pool	LID not found Other
15617	123326	R00311	48.42	442.67	9.54	0.00	4.00	20	12.07	Nose	Adrenal gland Brain
15623	689492	AA233070	21.53	173.65	8.06	1.00	0.00	17	375.84	Pool	LID not found Other
15625	415183	W93407	156.31	1364.45	8.62	0.00	4.00			Testis	LID not found Other
15627	1049321	W68682	41.06	320.75	7.81	0.00	0.00	1	620.01	Lung	LID not found Other
15630	309274	N93853	1.42	8.88	6.24	1.00	0.00			Testis	LID not found Other
15635	1055487	AA620784	13.77	107.63	7.83	1.00	5.00	19	281.83	Brain	LID not found Other
15636	753036	AA438460	11.07	68.74	6.82	1.00	0.00	X	245.06	Pool	LID not found Other
15645	201551	R87970	389.23	2400.79	6.17	2.00	1.00	10	104.78	Lung	LID not found Other
15646	309821	N95041	1160.17	5835.08	5.12	0.00	3.00	1	638.73	CNS	Adrenal gland Eye
15675	42415	R60981	10.39	95.92	9.24	0.00	1.00			Ignore	Colon Blood
15676	1473680	AA916728	7.54	77.58	10.29	5.00	1.00	2	645.89	Larynx	Ear Cervix
15689	767236	AA424675	42.83	235.28	5.49	2.00	0.00			Testis	LID not found Other
15695	646046	AA205914	235.50	1202.45	5.11	1.00	0.00			Cervix	Parathyroid Lung
15697	767239	AA418402	22.33	186.50	7.46	0.00	4.00			Brain	Pool
15699	43065	R81080	2.15	23.93	11.11	3.00	0.00	X	358.17	Aorta	Germ Cell
15713	767292	AA418392	13.06	457.14	35.00	1.00	0.00	12	42.89	Esophagus	Spleen Parathyroid
15723	42872	R61883	4.67	38.88	8.32	1.00	1.00			CNS	Germ Cell Pool
15726	766308	AA451853	8.52	117.88	12.38	6.00	0.00	20	247.78	Skin	Adrenal gland Bone
15729	767273	AA418408	8.82	102.98	11.68	0.00	1.00	4	871.55	CNS	Testis LID not found
15731	430509	R81289	6.09	38.08	7.39	0.00	0.00			Lung	Testis Eye
15735	567055	AA131316	20.35	200.56	9.86	4.00	1.00			CNS	LID not found Other
15738	726021	AA398341	6.22	36.00	5.79	0.00	1.00			CNS	
15763	281545	N51601	50.58	290.69	5.75	0.00	1.00				

Table 2A

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Table 2A

18072	435934	AA101844	8.42	83.54	6.76	1.00	0.00	197.2	Parathyroid	Placenta	Foreskin
18079	1470530	AA864524	26.34	148.49	8.06	1.00	0.00	469.2	Brain	Testis	LID not found
18086	33804	RA6000	4.09	158.41	38.75	1.00	1.00				
18087	1475595	AA873885	6.78	135.95	20.05	8.00	0.00	511.72	Pancreas	Brain	LID not found
18090	21277	R37467	1.43	7.40	5.16	1.00	1.00	182.80	Blood	Tonsil	Foreskin
18117	823575	AA407044	26.00	134.32	6.19	0.00	1.00				
18120	447167	AA4702673	9.06	48.14	5.31	1.00	0.00				
18123	53331	R15922	1.56	10.69	8.65	1.00	0.00				
18128	450152	AA103448	7.44	51.36	6.91	1.00	0.00	374.8	Ear	Colon	Blood
18130	595697	AA167382	9.76	58.78	6.02	1.00	0.00	333.64	Nose	LID not found	Other
18131	254749	NZ5085	231.79	1559.52	6.77	2.00	0.00		Pooled	Placenta	Lymph
18134	510658	AA101954	7.60	39.53	5.20	1.00	0.00	45.93	CNS	Whole embryo	Pool
18147	784276	AA447480	14.22	171.56	12.07	1.00	1.00			LID not found	Other
18148	395558	N80218	15.77	81.95	5.20	1.00	0.00			Tonsil	Heart
18152	323806	W46341	34.87	184.86	5.30	1.00	0.00			Germ Cell	Parathyroid
18174	566597	AA149987	7.57	69.85	9.23	2.00	0.00	111.13	Thymus	Pool	LID not found
18176	324322	W47410	7.90	59.11	7.43	0.00	1.00			LID not found	Other
18183	276464	N48794	168.77	1218.43	7.22	2.00	0.00		CNS	Ovary	Parathyroid
18186	810027	AA455275	7.28	51.92	7.13	3.00	0.00	11.91	Pooled	-	Whole embryo
18192	324983	W46487	61.73	387.67	6.28	0.00	3.00	148.01	Aorta	-	Pool
18202	586139	AA132172	117.75	750.27	6.37	0.00	4.00	358.37	-	Colon	Pool
18203	322005	W37418	27.10	141.67	5.23	1.00	0.00	703.17	Thymus	Whole embryo	Parathyroid
18204	366384	N90704	8.22	181.10	22.03	1.00	0.00		Whole embryo	Lung	LID not found
18206	613237	AA181767	12.54	257.51	20.53	0.00	1.00	341.05	Pooled	Placenta	Pool
18211	237206	N26899	49.64	328.85	6.82	0.00	2.00	402.09	Germ Cell	Eye	Kidney
18220	303110	N90774	60.91	313.84	5.15	0.00	2.00	108.43	Gall bladder	Testis	Kidney
18223	276703	N49005	4.61	40.05	8.66	2.00	0.00		CNS	LID not found	Other
18229	743481	AA809392	5.04	39.05	7.74	1.00	0.00	44.4	Neural	Testis	Foreskin
18231	626846	AA181426	97.61	549.50	5.63	1.00	0.00			Esophagus	Foreskin
18235	842840	AA485277	176.91	1425.30	8.10	2.00	0.00	878.07		LID not found	Other
18238	730958	AA116984	78.23	492.69	6.30	2.00	1.00	245.06	Testis	LID not found	Other
18248	214624	H71242	7.15	89.34	11.24	4.00	0.00	32.73	Pool	Brain	Heart
18263	531469	AA074079	213.29	1097.38	5.14	0.00	1.00		Uterus	LID not found	Other
18264	232912	H72543	68.12	688.70	8.79	2.00	3.00	378.93	Pool	LID not found	Other
18268	587268	AA132650	6.24	40.28	6.45	0.00	1.00	316.02	Colon	LID not found	Other
18271	595001	AA184782	19.84	171.87	8.67	2.00	0.00	390.78	Ear	Whole embryo	Ovary
18278	139304	R63714	155.10	854.15	5.61	2.00	0.00		Cervix	Placenta	LID not found
18281	592403	AA159497	0.80	11.45	14.28	4.00	0.00	167.12	Pancreas	Eye	Pool
18285	731198	AA417355	3.55	49.29	13.87	6.00	0.00	754.11	Parathyroid	Lung	Uterus
18288	197839	R98196	562.33	3431.32	6.10	1.00	0.00	263.38	Tonsil	Pool	LID not found
18298	743187	AA401438	15.16	181.33	11.96	0.00	4.00	103.36	Testis	LID not found	Other
18303	357180	W93544	471.01	2915.09	6.19	1.00	0.00			Foreskin	Whole embryo
18304	233827	H78411	49.18	259.02	5.27	2.00	1.00		Pool	LID not found	Other
18305	528118	AA064659	8.82	53.77	6.10	1.00	0.00	102.53	Gall bladder	Adrenal gland	Tonsil
18313	786671	AA481480	5.52	31.12	5.64	1.00	0.00	233.5	Pooled	Whole embryo	Janus
18315	838874	AA481785	129.64	632.97	5.04	1.00	0.00		Eye	Lymph	LID not found
18316	123585	R00035	44.95	274.86	6.11	0.00	3.00		Pool	LID not found	Other
18317	565947	AA136540	38.74	208.53	5.68	1.00	0.00		Eye	LID not found	Other
18318	731202	AA417252	4.57	32.74	7.17	1.00	0.00	39.19	Testis	Pool	LID not found
18321	88734	T64698	75.71	395.75	5.28	0.00	1.00		Pool	LID not found	Other
18325	201213	R99471	365.60	2018.98	5.52	0.00	2.00	227.18	Pool	LID not found	Other
18326	323041	W42450	322.08	1735.00	5.39	1.00	0.00	271.02	-	LID not found	Other
18336	29583	R42218	208.26	1111.72	5.34	0.00	1.00	130.93	Brain	LID not found	Other
18341	208769	H63241	414.28	2136.52	5.16	1.00	0.00	163.98	Pool	LID not found	Other
18351	43733	H04789	13.44	57.89	5.05	0.00	1.00	74.75	Breast	Prostate	Colon

Table 2A

16357	233942	H66122	80.90	487.59	6.03	0.00	2.00	101.02	Pool	LID not found	Other
16375	42331	R81821	87.34	378.58	5.62	2.00	0.00	449.86	Brain	LID not found	Other
16400	35820	R45632	8.48	48.45	5.71	1.00	0.00	Colon	Lung	Pool	Pool
16402	427778	A4002258	87.42	728.00	10.80	1.00	4.00	Peripheral ner	Pool	LID not found	Other
16405	239943	H81938	159.60	842.34	5.28	0.00	2.00	92.24	Placenta	Pool	Lung
16408	44092	H05282	14.23	96.83	6.31	1.00	0.00	714.07	Fore skin	Pool	Kidney
16409	267282	H93652	4.06	25.85	6.37	2.00	1.00	592.03	Peripheral ner	Adipose	Brain
16415	42803	R60014	3.64	20.45	5.62	0.00	0.00	421.53	Heart	Pool	LID not found
16421	766586	A4425056	8.20	58.99	6.41	2.00	0.00	Eye	Whole embryo	LID not found	Other
16430	766534	A4452118	18.17	111.38	6.13	0.00	1.00	Brain	LID not found	Other	Other
16435	42807	R60135	3.29	19.35	5.88	1.00	0.00	465.68	Pooled	Whole embryo	Prostate
16438	766537	A4452130	149.27	1224.89	8.21	2.00	0.00	Kidney	Brain	Pool	Pool
16439	898204	A4596594	7.74	50.13	6.48	2.00	0.00	39.72	Thyroid	Fore skin	Parathyroid
16454	785645	A452134	23.83	129.22	5.47	1.00	0.00	143.02	Thyroid	Lung	Pool
16467	42816	R60044	17.05	97.62	5.73	1.00	0.00	57.93	Tonsil	Placenta	Pool
16472	1387900	A4310225	2.63	17.36	6.14	1.00	0.00	201.74	Lung	Pooled	Placenta
16477	769953	A4424920	8.45	64.20	6.41	1.00	0.00	282.85	Ear	Whole embryo	Brain
16478	769850	A4452250	6.91	67.80	9.61	1.00	0.00	Testis	Spleen	Brain	Brain
16479	898227	A4598925	11.78	63.87	5.42	1.00	0.00	Tonsil	LID not found	Other	Other
16482	729538	A4398355	36.84	241.60	6.56	1.00	0.00	282.85	Ear	CNS	LID not found
16485	769961	A4425543	5.19	31.53	6.08	1.00	0.00	Kidney	Lung	Pool	Pool
16489	37880	R61372	1.68	148.03	87.95	4.00	0.00	Testis	LID not found	Other	Other
16500	117488	T90789	2.88	15.76	5.46	1.00	0.00	42.81	Skin	Pooled	Fore skin
16508	728889	A4398430	5.67	78.61	13.38	2.00	0.00	443.42	Pool	LID not found	Other
16511	898259	A4598678	61.65	286.40	5.56	0.00	1.00	144.58	Pancrreas	Testis	Whole embryo
16538	796330	A4461318	81.82	564.13	8.89	0.00	2.00	Colon	Smooth musc	Testis	LID not found
16547	247840	N33670	105.84	813.61	7.70	1.00	3.00	209.24	Pool	LID not found	Other
16562	798117	A4460961	7.15	68.47	9.58	2.00	0.00	191.7	Kidney	Tonsil	Colon
16568	418644	N65445	42.66	350.85	8.46	0.00	0.00	675.77	CNS	Whole embryo	LID not found
16611	292531	N62652	8.16	70.07	8.58	1.00	0.00	105.6	Lung	Breast	Pool
16612	510576	AA055768	6.41	257.50	47.64	5.00	0.00	427.01	Eye	Thyroid	LID not found
16615	510680	AA100293	7.37	46.12	6.28	1.00	0.00	361.52	Pool	Eye	Parathyroid
16616	1031698	AA809556	37.89	270.79	7.15	1.00	0.00	15.78	Pooled	Breast	Colon
16618	292122	N62434	14.00	145.88	10.42	3.00	0.00	48.08	Pool	LID not found	Other
16621	511117	AA068231	7.72	74.17	8.60	1.00	0.00	201.71	CNS	Eye	Lung
16634	794032	AA443712	13.38	74.39	5.56	1.00	0.00	285.97	Germ Cell	Pancrreas	Blood
16636	240148	H82435	8.91	58.88	6.81	3.00	0.00	391.77	Small intestine	Arter	Placenta
16637	810217	AA464698	51.18	448.88	8.77	0.00	1.00	463.73	Thyroid	Stomach	Parathyroid
16639	841821	AA487486	10.19	72.54	7.12	4.00	0.00				
16644	418712	N64658	30.88	354.57	11.44	5.00	0.00				
16648	1030649	AA068775	55.61	333.70	8.00	1.00	3.00				
16651	840837	AA486538	8.58	44.26	5.16	1.00	0.00				
16655	770554	AA427737	15.65	106.92	6.75	1.00	0.00				
16659	293058	N83777	639.84	3892.85	5.77	2.00	0.00				
16669	798723	AA443140	8.19	99.35	12.13	6.00	0.00				
16678	897587	AA496884	8.88	116.50	13.12	2.00	0.00				
16679	503234	AA151621	5.20	42.86	8.24	3.00	0.00				
16684	124139	R01246	15.32	133.36	8.70	2.00	4.00				
16685	288019	N82735	4.51	27.79	6.16	0.00	1.00				
16689	131452	R23270	25.24	176.24	6.98	0.00	1.00				
16701	757244	AA426025	12.54	336.28	26.82	3.00	0.00				
16703	197056	R82801	17.51	224.16	12.80	0.00	1.00				
16713	279106	N46353	240.04	1299.90	5.42	0.00	2.00				
16723	613730	AA453783	14.01	662.63	47.31	17.00	2.00				

Table 2A

16726	1030543	A4608923	68.21	439.99	6.45	0.00	3.00	Testis	LID not found Other
16729	278178	N46845	10.34	183.72	17.76	1.00	0.00	Cervix	LID not found Other
16730	827688	AA1697344	86.40	489.86	5.67	1.00	0.00	Adipose	LID not found Other
16736	754101	AA476818	8.96	118.63	13.25	2.00	0.00	CNS	Heart Whole embryo
16757	278168	N63529	10.90	63.95	5.91	1.00	2.00	516.49 CNS	LID not found Other
16765	754126	AA476623	8.58	74.13	8.64	2.00	0.00	620.52 Ear	Bone
16765	36189	AA476623	11.88	259.67	22.23	1.00	0.00	501.89 Brain	Prostate
16788	839898	AA481801	51.94	533.77	10.28	2.00	5.00	Eye	LID not found Other
16788	44081	H08256	12.14	100.01	8.24	0.00	3.00	75.63 Whole embryo	Testis Pool
16789	283975	N64024	53.28	351.08	6.59	0.00	4.00	337.96 Pool	LID not found Other
16804	160178	R85537	4.74	24.86	5.27	1.00	0.00	210.72 Pancreas	Lymph Heart
16806	37205	R49592	2.20	12.08	5.51	0.00	1.00	Brain	LID not found Other
16810	28705	R49357	420.29	2363.63	5.62	0.00	2.00	Neural	Whole embryo LID not found
16818	29030	R49377	35.87	255.76	7.17	2.00	0.00	127.28 Thyroid	Bone Whole embryo
16819	53031	R15948	38.42	214.31	5.88	1.00	2.00	179.58 Brain	LID not found Other
16824	4416514	AA777637	7.53	45.64	6.06	0.00	1.00	74.01 Whole embryo	Brain Breast
16831	1323320	H23223	6.30	33.03	5.25	0.00	1.00	155.35 Kidney	Heart Pool
16837	823615	AA496937	2.90	37.59	12.70	2.00	0.00	64.38 Placenta	Breast Tonal
16848	450080	AA703392	81.62	56.92	5.27	1.00	0.00	Brain	LID not found Other
16850	28959	R49687	8.55	82.56	9.66	9.00	0.00	Brain	Whole embryo Pool
16858	29077	R49683	147.22	747.28	5.08	0.00	1.00	Kidney	Forebrain Pool
16859	55159	R18146	3.83	31.36	8.18	1.00	1.00	50.5 CNS	Blood Lung
16863	1323448	AA873604	66.53	527.64	7.93	7.00	1.00	236.05 Germ Cell	Brain Breast
16868	172751	H19687	4.35	23.64	5.48	3.00	0.00	117.35 Brain	LID not found Other
16870	37505	R51103	6.14	63.69	10.73	1.00	0.00	Kidney	Pool LID not found
16878	1323539	AA859296	4.23	28.96	6.86	2.00	0.00	Brain	LID not found Other
16880	450710	AA704448	66.32	428.08	6.45	1.00	0.00	250.93 Brain	Lung Brain
16882	29251	R41389	11.62	203.87	17.54	1.00	0.00	742.57 Brain	Germ Cell Eye
16883	53061	R16144	5.27	34.98	6.64	0.00	1.00	287.68 CNS	Pooled Whole embryo
16884	221928	H92234	2.34	23.32	8.96	3.00	0.00	251 Adrenal gland	Germ Cell Gall bladder
16885	823647	AA489884	10.07	169.12	16.80	7.00	1.00	259.71 Pooled	CNS Parathyroid
16887	1323531	AA659028	19.86	697.63	35.12	1.00	0.00	697.77 Eye	Kidney Testis
16889	812871	AA464603	21.81	122.89	5.81	7.00	0.00	Brain	LID not found Other
16892	350392	AA013268	71.98	531.97	7.39	1.00	0.00	527.46 Esophagus	Pool LID not found
16894	33381	R48033	5.92	42.44	7.17	1.00	0.00	151.34 Neural	Brain Eye
16896	450745	AA704492	12.94	80.00	8.18	0.00	1.00	536.56 Synovial mem	Uterus
16907	257928	N27028	484.82	2447.39	5.05	1.00	0.00	741.96 Testis	Pancreas LID not found
16910	839882	AA190044	11.03	70.25	6.37	3.00	0.00	599.03	Testis
16918	729824	AA396633	22.10	113.58	6.14	1.00	0.00	64.16 Pooled	Placenta Muscle
16928	340904	W57767	4.41	28.83	8.54	1.00	0.00	99.67 Synovial mem	Parathyroid Whole embryo
16934	731348	AA421018	6.30	74.38	11.81	1.00	0.00	92.4 Colon	Testis
16943	731275	AA420968	316.25	1982.87	8.27	2.00	0.00	191.31 CNS	Testis Kidney
16956	307986	N02293	208.70	1483.93	7.11	0.00	2.00	Eye	LID not found Other
16952	593181	AA173408	24.92	212.05	8.51	2.00	0.00	Testis	Heart LID not found
16971	772962	AA476259	110.46	594.25	5.29	1.00	0.00	Pool	Kidney LID not found
16979	259627	N23778	9.89	52.36	5.30	1.00	0.00	389.24 Heart	LID not found Other
16983	280308	N47075	6.34	275.05	43.41	4.00	0.00	Testis	LID not found Other
16997	555949	AA136541	71.25	468.49	6.59	0.00	2.00	31.88 Pool	LID not found Other
17004	127111	R09504	7.00	40.11	5.73	0.00	0.00		
17010	742586	AA461547	14.68	80.48	5.48	1.00	0.00		
17020	129810	R07268	151.49	1000.79	6.81	2.00	1.00		
17025	360035	AA063577	87.68	497.57	5.09	1.00	0.00		
17030	731193	AA417356	4.29	26.97	6.29	1.00	0.00		
17032	243024	H95869	31.61	166.64	5.90	1.00	1.00		

Table 2A

17033	950479	AA599122	32.68	275.88	8.51	2.00	1.00	Adrenal gland	CNS	Heart
17053	560960	AA143070	16.04	141.11	8.38	0.00	1.00	577.03		
17056	212456	H69538	84.86	443.07	5.22	0.00	1.00	438.74	CNS	Umbilical cord/Muscle
17064	233174	H75737	92.20	548.81	5.95	0.00	2.00	37.19	Pool	LID not found Other
17068	134869	R31789	22.84	126.75	5.55	1.00	0.00		Placenta	LID not found Other
17075	730970	AA416552	14.34	115.50	8.05	2.00	0.00		Cervix	Colon
17077	627252	AA181480	13.52	79.20	5.86	0.00	1.00		Pool	LID not found Other
17080	296205	N70023	23.60	141.24	5.98	1.00	2.00		Testis	LID not found Other
17083	743445	AA695365	37.23	209.97	5.64	1.00	2.00	429.82	Ear	Colon
17112	42225	R60731	3.89	21.51	5.54	1.00	0.00		Testis	Skin
17114	360428	AA015663	50.88	354.88	6.97	0.00	3.00		Eye	LID not found Other
17115	105917	AA621047	13.40	74.55	5.56	1.00	0.00		Testis	LID not found Other
17118	742717	AA400194	70.90	568.08	6.02	0.00	4.00		Lung	LID not found
17124	42325	R61786	53.34	325.11	6.10	0.00	1.00		Brain	Testis
17135	813698	AA453759	67.21	339.22	5.05	0.00	1.00	230.58	Stomach	CNS
17144	26237	R41378	3.21	113.05	35.18	6.00	0.00			Whole embryo
17145	73609	T55714	57.17	330.82	5.78	1.00	0.00	72.01	Bone	Blood
17147	1055144	AA621363	12.13	95.11	7.64	0.00	1.00		Whole embryo/LID not found Other	
17152	35474	R45672	7.55	63.36	7.26	1.00	0.00	648.46	Brain	LID not found Other
17170	377556	AA055474	77.86	589.10	7.31	0.00	3.00	90.55	Forekin	Umbilical cord/Muscle
17173	251404	H97969	11.34	84.55	7.48	0.00	1.00		Whole embryo Testis	LID not found
17179	1055261	AA621480	224.97	1480.29	6.58	0.00	3.00		Forekin	LID not found Other
17181	251406	H97070	17.01	107.88	6.34	1.00	0.00	-6.63	Whole embryo/Brain	LID not found
17184	38588	R45102	57.13	312.38	5.47	1.00	0.00	438.11	Brain	Eye
17187	31883	R61390	287.32	1898.50	6.58	2.00	0.00		Pool	Muscle
17190	768603	AA476478	5.15	28.74	5.58	1.00	0.00	238.35	Smooth muscle	Thyroid
17191	898278	AA598970	6.52	92.18	6.88	4.00	0.00		Testis	LID not found Other
17194	726893	AA759046	12.03	107.70	8.86	4.00	2.00		Breast	Kidney
17200	1321598	AA759046	12.03	107.70	8.86	4.00	2.00	87.44	Breast	Brain
17207	898295	AA598397	3.63	20.90	5.76	1.00	0.00		Brain	LID not found Other
17211	37901	R69304	4.70	58.43	12.44	1.00	1.00	63.51	Eye	Brain
17220	245979	N55481	6.14	97.58	15.96	4.00	0.00			Breast
17221	769024	AA425309	10.75	56.03	5.21	1.00	0.00		Ovary	Uterus
17226	726934	AA398384	8.43	71.79	8.52	0.00	1.00		Breast	Tonsil
17238	898318	AA598828	12.20	63.98	6.25	0.00	1.00		Brain	LID not found Other
17243	38028	R56370	10.25	69.01	6.73	0.00	3.00	390.27	Ear	Whole embryo/LID not found
17246	786899	AA451890	10.22	105.14	10.29	0.00	1.00		Kidney	Breast
17247	898332	AA598841	22.64	125.57	5.55	2.00	0.00			Whole embryo
17248	1343732	AA723504	10.22	158.65	15.35	1.00	0.00	559.46	Whole embryo/Umbilical cord	Placenta
17262	786695	AA451811	9.48	57.80	6.10	0.00	1.00		Testis	LID not found Other
17266	727137	AA398757	6.22	94.00	15.12	1.00	0.00		Kidney	Brain
17269	811757	H05037	32.86	231.84	7.66	0.00	2.00	278.4	Whole embryo/Brain	LID not found
17271	168733	AA463449	11.06	145.52	13.14	1.00	1.00		Lymph	Prostate
17283	259460	N59234	159.39	1002.12	5.29	0.00	2.00	250.6	CNS	LID not found Other
17289	289770	N59287	66.50	466.12	5.41	0.00	1.00		Pool	LID not found Other
17300	416608	V96779	4.33	28.89	6.70	1.00	1.00	284.54	CNS	LID not found Other
17307	289774	N59289	10.62	61.76	5.88	1.00	0.00		Heart	Testis
17320	354698	AA024484	12.16	81.18	7.50	1.00	0.00	411.43	Heart	Brain
17327	797054	AA463230	5.04	459.69	78.12	1.00	0.00	397.63		Tonsil
17328	364932	AA023274	159.00	903.34	5.88	0.00	2.00			Heart
17338	778511	AA427854	17.41	90.36	5.19	1.00	0.00	71.09	Ignite	CNS
17340	417229	V987749	22.82	135.88	5.93	1.00	4.00		Uterus	Pool
17350	376866	AA046939	43.93	334.16	7.81	0.00	2.00	135.17		Eye
17358	241801	H93081	32.58	220.97	6.78	2.00	2.00	81.68	Pool	LID not found Other

Table 2A

17628	714498	AA0294229	2.48	21.09	8.50	1.00	0.00	1	51.33	Blood	Ovary	Tonsil
17630	38477	R49587	8.48	38.50	5.96	1.00	0.00	7	510.12	Brain	LID not found	Other
17647	1493527	AA854927	71.12	1181.16	16.61	1.00	0.00	7	510.12	Brain	Cervix	Colon
17650	29867	R42536	1.87	81.07	11.38	3.00	0.00	16	44.94	Lymph node	Pool	Pituitary
17652	725872	AA304130	7.33	81.07	11.05	3.00	0.00	16	44.94	Lymph node	Pool	Pituitary
17654	38804	R49117	125.73	631.55	5.07	1.00	0.00	12	226.22	Brain	LID not found	Other
17659	27711	R40025	25.25	149.02	5.90	2.00	0.00	13	112.85	Brain	LID not found	Other
17664	43183	AA700222	11.77	64.32	5.46	1.00	0.00	17	337.96	Lymph	Ovary	Heart
17674	594994	AA172372	85.73	876.22	10.22	0.00	3.00	11	404.11	Pool	LID not found	Other
17675	259870	N28850	62.72	430.12	6.86	0.00	3.00	11	404.11	Pool	LID not found	Other
17676	626166	AA168710	0.81	4.59	7.52	2.00	0.00	11	404.11	Pool	LID not found	Other
17700	324883	N83141	480.92	2527.12	5.25	1.00	0.00	11	404.11	Pool	LID not found	Other
17702	508553	AA158162	5.03	27.63	5.49	4.00	0.00	11	229.07	Head and neck	Pancreas	Breast
17712	841207	AA488731	7.59	88.94	11.71	1.00	1.00	2	529.87	Stomach	Pancreas	Whole embryo
17718	280789	N47500	100.87	588.37	5.83	2.00	0.00	15	205.42	Smooth muscle	CNS	Testis
17722	730739	AA435936	34.35	473.31	0.71	2.00	0.00	10	363.67	Gall bladder	Ovary	Adrenal gland
17730	897825	AA498788	33.55	183.49	5.47	0.00	1.00	1	92.81	Thymus	Stomach	Spleen
17738	804641	AA589107	426.73	3165.43	7.42	2.00	0.00	6	593.33	Lymph	Breast	Tonsil
17739	237796	N30821	5.69	45.22	7.94	1.00	0.00	6	593.33	Pool	LID not found	Other
17742	731410	AA412250	8.66	35.70	6.43	2.00	0.00	14	282.8	Blood	Pancreas	Eye
17748	308873	N83601	19.92	214.81	10.78	0.00	4.00	14	282.8	Lung	LID not found	Other
17751	277476	N56875	3.26	202.73	82.18	2.00	0.00	11	389.93	Aorta	CNS	Spleen
17750	342271	W60968	37.79	327.45	8.66	2.00	0.00	11	389.93	Colon	Pool	Uterus
17777	951108	AA620466	7.06	104.77	14.85	11.00	0.00	1	667.01	Ovary	Pool	Colon
17780	193478	HA71114	89.75	886.89	9.66	0.00	4.00	4	647.37	Prostate	Lymph	Pool
17785	592778	AA158211	2.59	24.16	9.32	6.00	0.00	16	462	Umbilical cord	Blood	Colon
17787	731047	AA421282	5.85	181.78	32.16	5.00	0.00	8	45.68	Prostate	Testis	Ovary
17789	504280	AA4149579	141.78	971.33	8.85	1.00	0.00	8	45.68	Prostate	Uterus	LID not found
17792	296172	N74387	40.78	223.20	6.47	0.00	1.00	8	45.68	Prostate	LID not found	Other
17802	743275	AA400412	195.10	1206.39	6.19	2.00	0.00	1	85.25	Colon	Pool	LID not found
17804	197821	R53744	11.02	70.35	6.39	1.00	0.00	1	85.25	Colon	Pool	LID not found
17805	586498	AA151945	50.82	331.60	6.52	0.00	2.00	1	85.25	Colon	Pool	LID not found
17812	206785	R88047	22.53	120.98	5.37	0.00	2.00	9	357.99	Nose	Parathyroid	Pool
17815	236689	H61554	5.08	44.71	8.81	6.00	0.00	9	357.99	Nose	Uterus	Pool
17817	712279	AA431750	7.65	85.43	8.55	2.00	0.00	9	357.99	Nose	Uterus	Pool
17818	742555	AA400434	5.90	38.89	8.26	1.00	0.00	9	357.99	Nose	Uterus	Pool
17828	124252	R02338	20.41	442.81	21.70	4.00	0.00	1	250.48	Pool	LID not found	Other
17833	628773	AA191322	317.46	2575.48	8.11	0.00	2.00	1	250.48	Pool	LID not found	Other
17838	194314	H50854	31.20	197.60	6.33	0.00	3.00	1	250.48	Pool	LID not found	Other
17840	201028	H48269	36.20	193.14	6.34	0.00	1.00	1	250.48	Pool	LID not found	Other
17849	611953	AA180080	193.85	1054.29	5.44	0.00	2.00	17	269.93	Muscle	Ovary	Pool
17852	202521	H53141	54.10	308.73	6.71	1.00	0.00	1	269.93	Muscle	Ovary	Pool
17854	731080	AA421479	14.26	78.95	5.54	0.00	1.00	1	269.93	Muscle	Ovary	Pool
17860	48404	H14346	3.40	66.51	19.54	2.00	2.00	9	287.9	Small intestine	Brain	LID not found
17864	38648	R48714	11.07	76.78	6.94	0.00	3.00	3	73.91	Brain	LID not found	Other
17865	31811	R41724	5.62	37.42	6.43	1.00	0.00	2	508.52	Esophagus	Brain	LID not found
17897	1035432	AA021044	200.15	1949.65	9.46	0.00	3.00	10	408.79	Forebrain	LID not found	Other
17899	281582	H88757	35.10	223.01	6.35	0.00	3.00	14	47.53	Ear	CNS	Lymph
17871	42827	R80995	3.19	27.33	8.57	1.00	2.00	1	576.51	Whole embryo	LID not found	Other
17875	1035457	AA621685	59.86	378.78	6.33	0.00	3.00	1	576.51	Whole embryo	LID not found	Other
17881	41128	R59116	75.74	406.20	5.36	1.00	0.00	10	286.56	Kidney	CNS	Eye
17884	42793	R59122	6.88	64.57	9.41	6.00	1.00	10	286.56	Kidney	CNS	Eye
17885	262966	H98789	75.37	400.82	5.36	0.00	2.00	2	114.71	Forebrain	Pool	LID not found
17887	1046484	AA021132	12.85	234.27	18.52	3.00	0.00	2	114.71	Forebrain	Pool	LID not found

Table 2A

17895	27544	R40037	4.47	516.74	115.48	11.00	0.00	0.00	0.00	86.17 Neural	Blood	Eye
17897	50762	H17333	19.17	130.24	6.79	1.00	0.00	0.00	0.00	153.9 Brain	LID not found	Other
17901	265042	N20633	147.49	830.07	5.64	0.00	2.00	0.00	0.00	231.76 Brain	Kidney	Placenta
17904	27769	R40176	3.70	282.41	76.39	5.00	0.00	0.00	0.00	511.92 Breast	LID not found	Other
17916	39306	R51357	5.44	29.08	5.34	1.00	0.00	0.00	0.00	Brain	LID not found	Other
17921	51831	R22949	27.29	436.65	10.01	6.00	2.00	0.00	0.00	467.98 Brain	Muscle	Whole embryo
17935	42123	R39621	18.88	97.48	10.48	2.00	4.00	0.00	0.00	648.46 Parathyroid	LID not found	Other
17948	28564	R37633	11.50	97.05	8.44	2.00	4.00	0.00	0.00	395.98 Brain	LID not found	Other
17952	35039	R45165	1.77	30.50	17.21	2.00	0.00	0.00	0.00	150.93 CNS	Brain	LID not found
17956	395711	AA757764	2.71	18.21	6.72	1.00	0.00	0.00	0.00	Ovary	Aorta	Pancreas
17957	811764	AA463444	8.98	50.12	5.02	1.00	0.00	0.00	0.00	Whole embryo	LID not found	Other
17958	787876	AA452156	83.55	599.04	6.40	2.00	0.00	0.00	0.00	42.75 Brain	Lung	Pod
17960	1315309	AA815407	2.10	15.39	7.33	4.00	0.00	0.00	0.00	365.77 Whole embryo	Testis	Brain
17963	43405	H05072	20.24	115.72	5.72	0.00	2.00	0.00	0.00	755.79 Stomach	Pooled	Tonsil
17966	787879	AA452165	8.03	78.49	9.63	1.00	0.00	0.00	0.00	143.24 Synovial mem	Bone	Pooled
17969	1391644	AA769301	2.86	33.76	11.84	3.00	0.00	0.00	0.00	301.37 Ovary	Spleen	Blood
17970	727263	AA412059	14.54	162.47	11.17	3.00	0.00	0.00	0.00	86.02 Breast	Pancreas	Colon
17976	1391682	AA769328	8.87	64.47	9.66	2.00	0.00	0.00	0.00	552.97 Pancreas	Thyroid	Lymph
17980	392822	AA708298	352.80	1768.66	5.07	1.00	0.00	0.00	0.00	279.64 Pooled	Bone	Aorta
17982	786087	AA453170	14.32	160.86	10.55	2.00	0.00	0.00	0.00	204.16	Pooled	Adrenal gland
17984	1376827	AA817873	36.74	205.86	5.63	0.00	1.00	0.00	0.00	162.31 Tonsil	Lung	Whole embryo
17988	769552	AA429219	100.08	653.65	6.63	2.00	0.00	0.00	0.00	216.64 Skin	Lymph	Brain
17991	666292	AA262351	4.89	30.63	6.53	3.00	0.00	0.00	0.00	22.36 Thymus	Eye	Breast
17992	1376828	AA812964	20.24	103.06	5.09	1.00	0.00	0.00	0.00	356.16 Pooled	Fore skin	Pod
17993	787461	AA418004	21.98	154.39	7.02	2.00	0.00	0.00	0.00	108.17 Germ Cell	Kidney	Prostate
17996	725365	AA292054	4.71	29.38	6.24	1.00	0.00	0.00	0.00	Ignore	Esophagus	Gall bladder
18000	1376853	AA812956	6.89	41.73	6.06	1.00	0.00	0.00	0.00	394.02 Brain	LID not found	Other
18005	811803	AA463476	29.53	157.15	5.32	1.00	0.00	0.00	0.00	82.78 Brain	Whole embryo	Colon
18010	785337	AA478502	1.85	14.03	8.52	1.00	0.00	0.00	0.00	Testis	Germ Cell	Prostate
18011	43815	H05741	79.24	820.59	7.83	4.00	0.00	0.00	0.00	Prostate	Kidney	Lung
18016	1393018	AA843718	13.50	104.96	7.77	1.00	0.00	0.00	0.00	215.24 Fore skin	Cervix	CNS
18019	43828	H05759	21.31	266.76	12.52	0.00	1.00	0.00	0.00	78.3 Thyroid	Bone	Ovary
18021	811819	AA463483	8.47	55.12	6.51	0.00	1.00	0.00	0.00	CNS	LID not found	Other
18025	757488	AA418015	9.01	55.61	6.17	1.00	0.00	0.00	0.00	Adipose	Muscle	Whole embryo
18027	43829	H05770	65.65	366.75	5.80	2.00	0.00	0.00	0.00	Skin	Umbilical cord	Pooled
18028	266720	N22904	11.09	57.41	5.16	1.00	0.00	0.00	0.00	109.01 Ear	Germ Cell	Ovary
18035	43935	H05777	3.48	16.43	5.30	1.00	0.00	0.00	0.00	338.02 Fore skin	Eye	Breast
18038	788232	AA454079	48.84	441.69	9.05	0.00	1.00	0.00	0.00	CNS	LID not found	Other
18040	1408407	AA868278	15.14	85.09	5.52	1.00	0.00	0.00	0.00	Parathyroid	Lung	Kidney
18043	43949	H04992	35.21	325.28	9.24	4.00	5.00	0.00	0.00	CNS	LID not found	Other
18044	278570	N95177	15.85	113.73	7.18	1.00	0.00	0.00	0.00	Heart	Pool	LID not found
18046	788234	AA454080	62.67	630.36	10.06	3.00	0.00	0.00	0.00	518.76	CNS	LID not found
18051	289816	N82176	57.84	403.42	6.97	3.00	0.00	0.00	0.00	CNS	Pool	LID not found
18052	417473	W88587	12.02	121.11	10.08	1.00	0.00	0.00	0.00	CNS	Pool	LID not found
18054	742581	AA400247	15.11	75.69	5.01	0.00	1.00	0.00	0.00	CNS	Whole embryo	Tonsil
18058	951080	AA520446	18.69	105.77	5.37	1.00	0.00	0.00	0.00			
18068	835580	AA459804	10.53	95.45	9.06	0.00	1.00	0.00	0.00			
18078	251565	H96630	44.59	232.74	5.22	0.00	1.00	0.00	0.00			
18083	287721	N82231	164.41	1174.02	6.37	2.00	0.00	0.00	0.00			
18084	417800	W88745	7.01	58.16	8.29	3.00	0.00	0.00	0.00			
18087	289264	W88993	25.10	129.37	5.15	1.00	0.00	0.00	0.00			
18108	355943	W93299	5.80	29.03	5.19	1.00	0.00	0.00	0.00			
18114	766239	AA406875	229.50	3287.29	14.32	3.00	0.00	0.00	0.00			
18123	286416	N82340	38.73	185.36	5.05	0.00	1.00	0.00	0.00			
18138	286561	N82376	275.48	1544.76	5.61	0.00	1.00	0.00	0.00			

Table 2A

18144	565779	AA135670	168.04	1480.99	8.87	2.00	3.00	11	40.11	Uterus	Lung	Pool	Whole embryo
18166	214011	N38781	8.45	75.14	8.89	2.00	0.00			Spleen	Pool	Uterus	
18167	264097	N52382	16.51	176.68	10.70	3.00	0.00			Parathyroid	CNS	Uterus	
18161	930983	AA620401	203.33	2530.53	8.93	2.00	0.00	12	130.31	Umbilical cord	Pituitary	Uterus	
18180	121573	T97723	25.56	225.06	8.82	0.00	3.00			Pool	LID not found	Other	
18187	327465	W020486	0.78	6.24	6.02	2.00	0.00			Colon	Testis	Testis	
18189	280213	N84376	2.94	51.53	17.31	5.00	0.00			CNS	Brain	Heart	
18193	511233	AA088701	9.87	68.21	17.31	3.00	0.00			Prostate	Lymph	Whole embryo	
18201	376040	AA040332	5.28	148.30	28.06	4.00	0.00			Kidney	Lung	Pool	
18221	269559	N74895	7.11	44.08	6.20	2.00	0.00	4	20.33	Pool	LID not found	Other	
18228	238924	H78845	9.87	89.51	9.07	0.00	4.00			Testis	LID not found	Other	
18232	1031820	AA609668	54.39	377.37	6.94	0.00	3.00			Testis	Pool	LID not found	
18234	795325	AA454177	586.92	3757.78	6.40	1.00	0.00	3	421.87	Skin	Neural	LID not found	
18243	823618	AA495948	67.73	335.47	5.25	1.00	0.00			Brain	Whole embryo	Pool	
18248	754303	AA479289	18.72	193.74	9.77	1.00	0.00	2	131.79	CNS	LID not found	Other	
18249	230352	AA49207	1709.09	11640.06	6.02	1.00	0.00	21	229.23	Brain	Pool	LID not found	
18250	208409	H83111	12.91	100.76	7.80	1.00	0.00			Parathyroid	Germ Cell	Uterus	
18255	813148	AA469286	93.51	429.04	6.76	0.00	2.00			Pool	Lung	LID not found	
18259	799004	AA425160	19.98	127.13	6.37	0.00	1.00			Ear	Adrenal gland	Whole embryo	
18275	786624	AA460530	7.89	122.10	15.48	4.00	0.00			Ear	LID not found	Other	
18277	287122	N68866	36.91	350.24	9.49	0.00	4.00			Ear	Pituitary	Pool	
18278	754334	AA478308	16.00	106.30	6.64	0.00	1.00	11	69.18	Adrenal gland	Bone	Pool	
18286	754346	AA436138	6.46	46.83	7.72	4.00	0.00			Testis	LID not found	Other	
18302	1031568	AA609304	8.64	69.67	7.66	2.00	0.00			Ear	Kidney	Testis	
18309	280857	N67693	12.12	66.86	5.52	1.00	0.00	16	425.5	CNS	LID not found	Other	
18313	283890	N50787	8.98	62.16	7.47	2.00	0.00			Heart	Pool	Parathyroid	
18316	812143	AA456022	20.35	173.77	8.54	1.00	0.00	2	444.9	Blood	CNS	Pool	
18319	788415	AA456437	67.82	361.18	5.34	1.00	0.00			Larynx	Colon	LID not found	
18322	587595	AA132584	1515.02	19357.61	12.77	3.00	1.00	2	742.06	Brain	Pool	LID not found	
18323	35056	R45192	14.29	87.10	6.11	2.00	0.00			Pool	LID not found	Other	
18325	282130	N68075	358.30	2556.36	7.13	0.00	2.00			Testis	LID not found	Other	
18328	1031598	AA609474	17.43	175.25	10.05	2.00	0.00			Cervix	Ovary	Testis	
18330	628842	AA191424	14.03	148.33	10.57	3.00	1.00	7	111.22	Adrenal gland	Thyroid	CNS	
18337	813185	AA456323	8.88	45.64	5.15	1.00	0.00			Pool	LID not found	Other	
18343	1455394	AA853265	138.15	913.08	6.71	1.00	0.00			Adrenal gland	Thyroid	CNS	
18344	459841	AA775889	7.41	96.51	13.02	1.00	0.00	4	34.95	Foreskin	Skin	Whole embryo	
18351	1325065	AA875880	1.40	6.93	6.10	1.00	0.00			Colon	LID not found	Other	
18354	30093	R40129	435.03	2844.93	8.54	0.00	2.00	7	521.82	Brain	LID not found	Other	
18357	823867	AA490469	11.83	75.01	6.34	1.00	0.00	11	289.86	Pituitary	CNS	Lung	
18358	39611	R50755	3.85	26.34	6.94	1.00	0.00	20	270.26	Eye	Brain	LID not found	
18359	1325761	AA873089	6.69	129.84	19.40	3.00	0.00	17	320.39	Lymph node	Ovary	Esophagus	
18364	755762	AA498452	37.94	470.21	12.38	5.00	0.00	19	74.38	Omentum	Adipose	Muscle	
18372	770574	AA476274	77.16	388.03	5.03	1.00	0.00	1	351.84	Pituitary	Kidney	Brain	
18375	1455566	AA653086	4.24	22.99	5.42	1.00	0.00			Lung	Brain	LID not found	
18379	26277	R37472	5.33	35.43	6.85	1.00	0.00	1	14.16	Parathyroid	Lung	Pancreas	
18380	769565	AA425821	77.58	541.05	6.97	1.00	0.00	11	22.02				
18383	1455976	AA462371	604.09	4223.60	5.25	1.00	0.00			Synovial mem	Ovary	Blood	
18392	460899	AA104187	31.88	226.60	7.69	0.00	1.00	17	537.42	Whole embryo	Pool	Whole embryo	
18396	810959	AA469400	43.78	244.90	5.60	1.00	0.00	22	86.54	Kidney	Heart	Bone	
18399	1455835	AA653282	2.08	10.48	5.04	1.00	0.00			Stomach	LID not found	Other	
18401	813265	AA455935	55.09	342.30	6.21	1.00	0.00	8	323.97	Brain	LID not found	Other	
18406	38740	R51273	8.72	555.06	57.08	4.00	0.00	12	16.74	Brain	LID not found	Other	
18418	30428	R42061	6.38	76.22	12.27	2.00	0.00			Pituitary	Liver	Germ Cell	
18422	36542	R48708	628.99	3751.62	5.96	1.00	0.00	2	642.34	Pituitary	Liver	Germ Cell	

Table 2A

18425	813278	AA455929	3.56	47.02	13.22	0.00	1.00	3	710.38	Thymus	Heart	Placenta
18427	530608	AA071089	34.95	225.61	8.45	1.00	0.00	17	17.13	Eye	Fore skin	Uterus
18428	269808	N28769	8.16	41.77	5.12	1.00	0.00	16	19.65	Umbilical cord	Pooled	LID not found
18435	205582	H59175	97.69	594.60	8.09	1.00	0.00	4	350.76	Pool	Heart	LID not found
18439	245890	N55557	65.33	381.05	5.53	1.00	0.00	14	283.02			
18448	175950	H40880	6.46	34.04	5.27	1.00	0.00	16	48.75	Peripheral ner	Synovial mem	Skin
18458	486188	AA040742	125.41	701.27	5.59	1.00	0.00	13	282.85	Ear	CNS	Bone
18472	177074	H40921	4.58	101.59	22.18	1.00	0.00	12	362.5	CNS	Blood	Muscle
18492	156952	R74321	14.52	80.28	5.53	1.00	0.00	12	362.5	CNS	Placenta	Brain
18494	713213	AA283631	1.23	10.02	8.16	1.00	0.00	5	389.65	Tonsil	LID not found	Other
18498	205527	H61464	8.30	49.35	5.95	0.00	1.00	1	174.05	Breast	Uterus	Muscle
18500	159470	H15913	2.97	26.21	8.82	1.00	0.00	1	174.05	Breast	Uterus	Muscle
18502	713193	AA284634	21.42	118.93	5.48	0.00	1.00	1	174.05	Breast	Uterus	Muscle
18522	488535	AA098887	30.61	212.82	6.95	0.00	1.00	1	174.05	Breast	Uterus	Muscle
18524	159497	H15926	0.89	7.18	8.03	1.00	0.00	8	107.5	Pooled	Tonsil	Spleen
18528	713263	AA283020	5.54	247.35	44.87	5.00	0.00	8	107.5	Pooled	Tonsil	Spleen
18528	385458	AA275745	120.31	712.88	5.93	1.00	0.00	7	511.27	Germ Cell	Pool	Brain
18543	418886	H68913	3.86	30.26	7.84	1.00	0.00	7	511.27	Germ Cell	Pool	Brain
18548	435663	AA101300	37.38	245.05	6.58	1.00	0.00	11	274.11	Ovary	Fore skin	Eye
18553	392711	AA170858	51.42	272.67	5.30	1.00	0.00	11	274.11	Ovary	Fore skin	Eye
18552	450213	AA170858	81.76	613.53	6.89	1.00	0.00	11	274.11	Ovary	Fore skin	Eye
18594	290654	N71714	85.42	452.83	5.30	1.00	0.00	11	274.11	Ovary	Fore skin	Eye
18597	235886	H61223	3.61	70.06	19.39	2.00	0.00	11	274.11	Ovary	Fore skin	Eye
18600	450233	AA103553	21.14	143.39	6.78	0.00	1.00	11	274.11	Ovary	Fore skin	Eye
18602	280667	N71768	113.78	630.75	6.54	1.00	0.00	11	274.11	Ovary	Fore skin	Eye
18618	281323	N72252	45.03	389.98	8.66	0.00	3.00	11	274.11	Ovary	Fore skin	Eye
18628	814039	AA453368	7.30	52.41	7.18	2.00	0.00	11	274.11	Ovary	Fore skin	Eye
18630	701746	AA292700	22.84	120.50	5.32	1.00	0.00	8	465.94	CNS	Umbilical cord	Adipose
18631	491524	AA148505	70.95	437.28	6.16	2.00	0.00	8	465.94	CNS	Umbilical cord	Adipose
18634	701788	AA292655	70.10	525.41	7.50	3.00	0.00	8	465.94	CNS	Umbilical cord	Adipose
18638	814158	AA498253	81.16	441.07	5.43	0.00	1.00	19	270.51	Esophagus	Nose	Liver
18639	502438	AA134862	28.78	178.49	6.13	1.00	0.00	13	306.89	Fore skin	Uterus	Bone
18641	824525	AA490901	18.29	225.65	12.34	0.00	0.00	4	451.81	Bone	Ovary	Tonsil
18649	824658	AA491292	5.00	56.70	11.34	3.00	0.00	2	602.09	Thyroid	Cervix	CNS
18657	824792	AA498068	68.39	633.24	9.28	0.00	1.00	16	68.81	Synovial mem	Spleen	Tonsil
18689	824870	AA498875	8.68	80.41	6.14	0.00	1.00	2	203.42	Tonsil	Cervix	Ear
18690	824870	AA498875	8.68	80.41	6.14	0.00	1.00	2	203.42	Tonsil	Cervix	Ear
18697	763544	AA278049	11.07	76.53	6.91	1.00	0.00	15	135.22	Pool	LID not found	Other
18698	192147	H40538	37.47	218.85	5.84	2.00	0.00	15	135.22	Pool	LID not found	Other
18699	221890	H85020	2.22	14.05	6.32	1.00	0.00	10	362.95	Nose	Umbilical cord	Thyroid
18699	132536	AA459808	32.62	615.95	18.77	2.00	0.00	10	362.95	Nose	Umbilical cord	Thyroid
18700	361280	R26785	4.51	127.22	28.21	17.00	1.00	12	287.4	Eye	Bone	LID not found
18702	130060	AA016292	3.10	16.35	5.28	1.00	0.00	12	287.4	Eye	Bone	LID not found
18718	149178	R19410	6.43	50.11	7.80	2.00	0.00	12	287.4	Eye	Bone	LID not found
18720	222400	H83996	4.31	28.55	6.86	2.00	0.00	3	218.28	Pool	LID not found	Other
18726	191787	H40323	13.09	97.08	7.42	3.00	0.00	20	203.31	Esophagus	Placenta	Pool
18727	149245	R82522	14.87	128.12	8.80	1.00	0.00	12	272.74	Eye	Brain	LID not found
18728	222157	H85345	2.36	12.93	5.48	1.00	0.00	12	53.22	Pool	LID not found	Other
18742	193333	H40070	147.08	765.66	5.35	1.00	0.00	12	53.22	Pool	LID not found	Other
18744	223180	H86569	126.00	761.16	6.33	1.00	0.00	6	172.31	Nose	Prostate	LID not found
18756	381642	H86174	13.08	71.88	5.48	2.00	0.00	6	172.31	Nose	Prostate	LID not found
18759	148914	R82802	10.08	229.44	22.75	8.00	1.00	2	747.88	Esophagus	Thyroid	Ovary
18770	281010	N47891	125.41	685.25	5.46	1.00	0.00	2	747.88	Esophagus	Thyroid	Ovary
18777	756882	AA443886	4.00	21.55	5.39	1.00	0.00	2	747.88	Esophagus	Thyroid	Ovary
18784	454328	AA077240	66.72	371.25	5.40	1.00	0.00	2	747.88	Esophagus	Thyroid	Ovary

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18762	454468	AA677327	3.61	19.78	5.46	1.00	0.00	Pool	LID not found	Other
18795	431408	AA706839	9.31	71.45	7.67	2.00	2.00	230.35 Nose	Foreskin	Whole embryo
18796	451511	AA707336	3.21	49.68	15.49	1.00	0.00			
18797	286019	N21514	13.20	85.88	6.49	0.00	1.00			
18820	431554	AA707402	95.53	527.56	5.92	0.00	1.00	Germ Cell	Ovary	Kidney
18825	709917	AA430527	38.29	314.40	8.66	2.00	0.00	307.8 CNS	Pancreas	Pool
18827	431605	AA678225	4.78	20.09	6.11	1.00	0.00			
18828	451587	AA707086	9.47	64.90	6.86	1.00	0.00	181.96 CNS	Tonsil	Pool
18830	289534	N53251	1.08	5.82	5.51	1.00	0.00			
18831	433603	AA701677	5.89	83.98	14.28	3.00	1.00	158.47 Tonsil		Prostate
18832	454564	AA377025	4.56	53.56	11.74	1.00	0.00			
18833	789933	AA430506	51.44	275.62	5.36	1.00	0.00	191.74 Adipose	CNS	Lung
18836	289862	N82783	21.50	1195.87	5.85	1.00	0.00			
18839	431604	AA701668	23.02	128.49	5.58	1.00	1.00			
18844	451664	AA707550	28.54	156.61	5.49	0.00	2.00			
18848	454486	AA677336	8.55	59.34	6.94	0.00	2.00	270.81 Whole embryo	LID not found	Other
18849	789945	AA430408	25.10	421.35	14.49	1.00	0.00	Pool	Eye	Ovary
18851	431646	AA764411	16.88	100.44	5.96	1.00	0.00	Heart	Pool	LID not found
18854	289881	N82188	38.26	202.19	5.15	0.00	1.00	217.08 Ear	Pooled	Blood
18857	789947	AA430410	4.89	27.40	5.81	1.00	0.00	Larynx	Foreskin	Tonsil
18871	682749	AA210699	5.05	46.02	9.11	1.00	0.00	CNS	Tonsil	LID not found
18872	826183	AA521448	2.55	45.23	17.71	1.00	0.00	236.68 Blood		Uterus
18877	39814	RS3929	36.52	270.86	7.42	1.00	0.00			
18895	693151	AA214559	4.24	21.28	5.02	1.00	0.00	78.08 Synovial mem	Ovary	Tonsil
18897	45605	H08206	1.16	9.09	7.73	1.00	0.00	260.48 Uterus	Kidney	Brain
18922	491545	AA148542	16.80	88.85	5.14	1.00	0.00	387.11 Esophagus	Pancreas	Gall bladder
18924	160113	H22011	10.20	53.38	5.23	1.00	0.00	97.67 Small intestine	Pool	LID not found
18930	489831	AA101875	149.77	786.27	5.25	1.00	0.00	Breast	Pool	Ear
18942	814086	AA465355	19.20	271.73	14.16	1.00	0.00	387.41 Aorta	Neural	Tonsil
18943	240609	N59553	5.16	46.17	8.91	1.00	0.00	158.89 Synovial mem	Colon	Heart
18975	275118	R85452	83.81	454.95	5.42	0.00	1.00	Adrenal gland	Placenta	Heart
18976	275118	R85452	83.81	454.95	5.42	0.00	1.00	278.55 Pool	LID not found	Other
18983	275553	R83309	10.14	101.43	10.01	1.00	0.00	160.11 Uterus	Bone	Muscle
18995	208078	H59805	3.87	35.38	9.15	0.00	1.00	339.03 Germ Cell	Pool	Brain
19003	208078	R89072	4.77	24.82	5.20	1.00	0.00	37.17 Pool	Brain	LID not found
19004	162308	H26090	4.97	58.70	11.81	1.00	0.00	Adrenal gland	Pooled	Parathyroid
19007	293745	N65850	20.69	113.77	5.50	1.00	0.00	191.53 Smooth musc	Parathyroid	Ear
19021	719437	AA293300	29.05	319.23	10.89	3.00	0.00	310.00 Esophagus	Breast	Aorta
19022	277996	N83445	13.86	124.81	8.93	1.00	0.00	213.74 CNS	Muscle	Whole embryo
19024	450330	AA703809	24.54	201.54	8.18	6.00	0.00			
19031	416202	W85106	4.49	22.43	5.00	1.00	0.00	144.22 Thymus	Parathyroid	Adrenal gland
19037	236413	H82421	19.85	118.04	5.85	2.00	1.00	Ovary	LID not found	Other
19040	450402	AA682863	26.63	154.80	6.42	0.00	2.00	Foreskin	Pool	LID not found
19053	714178	AA285018	8.49	103.62	12.20	1.00	0.00	461.79 Ovary	Eye	Whole embryo
19068	435817	AA701527	43.78	297.43	6.79	0.00	2.00	105.87 Foreskin	Pancreas	Cervix
19069	725405	AA392286	22.22	126.78	5.88	1.00	0.00	387.95 Larynx	Adipose	Pancreas
19070	278572	N66178	20.14	469.89	23.33	3.00	1.00	CNS	Kidney	Lymph
19085	278544	N66205	3.06	64.54	21.08	5.00	1.00	417.03 CNS	Brain	Lung
19092	435645	AA701550	5.53	32.87	5.95	1.00	0.00	305.36 Pool	LID not found	Other
19096	450396	AA682861	19.81	181.97	9.28	4.00	1.00	47.22 Thyroid	Blood	Parathyroid
19097	398045	AA757658	19.42	103.78	5.63	0.00	1.00	LID not found	Other	Other
19103	416479	W88808	6.11	217.82	35.63	3.00	2.00	Pool	Muscle	Tonsil
19104	450410	AA682760	17.20	105.47	6.13	0.00	2.00	Blood	LID not found	Other
19109	824884	AA465892	5.51	745.77	135.40	22.00	2.00	Tonsil		
19116	814320	AA459110	4.20	31.90	7.59	1.00	0.00			

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19118	703636	AA276594	43.54	229.69	5.28	1.00	0.00	6	118.69	Tonsil	LID not found	Other
19120	614328	AA459119	5.31	35.16	6.63	1.00	0.00	X	80.62	Pooled	Stomach	Tonsil
19122	703732	AA278764	9.05	332.86	36.76	2.00	0.00	8	518.22	Tonsil	Pool	-
19128	614341	AA459123	3.53	16.04	5.11	1.00	0.00			Uterus	Tonsil	Germ Cell
19131	743611	AA634361	67.14	356.73	5.34	1.00	0.00			Nose	Ecophagus	Smooth muscle
19137	826076	AA486232	180.13	1089.00	6.05	1.00	0.00	X	121.02	Thyroid	Parathyroid	Prostate
19139	743680	AA634427	1.35	7.43	5.52	1.00	0.00	11	249.74	Gall bladder	Thyroid	Pooled
19141	825229	AA504139	28.50	155.85	5.47	1.00	0.00	17	605.62	Stomach	Tonsil	Colon
19145	825234	AA504132	176.45	975.60	5.47	0.00	0.00				LID not found	Other
19154	435597	AA703169	4.36	107.56	24.65	4.00	0.00	4	445.66	Eye	Lung	LID not found
19160	223012	H84461	0.70	5.06	7.22	2.00	0.00			Eye	Pooled	Germ Cell
19176	223121	H84130	15.25	85.15	5.58	1.00	0.00	17	317.7	Eye	Lung	LID not found
19194	49563	H15065	32.18	332.14	10.32	1.00	0.00	14	278.24	Eye	Lung	LID not found
19196	361668	W96187	32.38	242.71	7.50	2.00	0.00	6	99.85	Pooled	Germ Cell	Pool
19198	193863	H51100	37.50	246.33	6.62	0.00	3.00	16	63.84	Pituitary	Aorta	Pancreas
19208	223323	H86545	1.77	9.71	5.48	1.00	0.00			Omentum		Synovial membrane
19210	655900	AA669557	171.06	1062.60	6.21	1.00	0.00	6	163.7	Umbilical cord	Trismus	LID not found
19218	637681	AA633766	1304.49	7051.92	5.19	1.00	0.00	17	34.23	Placenta	LID not found	Other
19223	149446	H04399	24.61	176.40	7.25	0.00	2.00	11	87.01	CNS	Brain	Pool
19224	231461	H92588	4.49	30.32	6.75	2.00	0.00	1	41.88	Tonsil	Brain	Uterus
19239	149547	H00298	12.32	40.66	6.93	0.00	1.00	3	675.42	Liver	Placenta	Ovary
19242	971367	AA663050	2957.43	17047.86	5.76	2.00	0.00	6	366.65	Marrow	Umbilical cord	Pooled
19243	134976	R32354	26.29	156.97	5.36	1.00	0.00	19	33.56	Placenta	Blood	Placenta
19251	431559	AA676268	3.91	81.55	23.21	2.00	1.00	17	279.18	Brain	CNS	
19260	451606	AA707084	5.97	30.63	5.17	1.00	0.00				CNS	
19266	281605	N51614	6.91	46.04	7.82	2.00	0.00	17	329.19	Lymph	CNS	Whole embryo
19269	267254	N24580	12.40	65.77	5.31	1.00	0.00	17	53.59	Parathyroid	Forebrain	
19277	268849	N23134	362.16	2194.57	8.06	1.00	0.00	9	135.66	Lung	Head and neck	Adipose
19281	770289	AA434435	113.18	599.49	5.30	1.00	0.00				CNS	Brain
19282	451707	AA707659	25.72	272.14	9.16	1.00	0.00	4	603.66	CNS	Brain	Germ Cell
19286	261615	N48103	16.46	138.13	7.48	1.00	0.00	6	162.05			
19302	289936	N99338	21.53	303.04	14.07	0.00	1.00					
19305	770348	AA437370	28.08	140.70	5.01	1.00	0.00					
19311	434824	AA703115	0.64	7.13	7.58	2.00	0.00	11	230.02	Thymus	Synovial mem	Adrenal gland
19316	451769	AA708795	27.54	192.58	6.99	1.00	1.00				Germ Cell	Whole embryo
19329	770768	AA427583	29.60	165.06	5.59	1.00	0.00			Stomach	LID not found	Other
19332	451733	AA707660	5.55	34.25	9.17	1.00	0.00			Pool		
19336	201761	N51752	21.43	168.08	8.78	3.00	0.00				Blood	Ovary
19339	431808	AA876024	3.80	27.92	7.36	1.00	0.00	9	132.36	Brain	Blood	Breast
19341	267713	N23192	8.30	44.21	5.32	0.00	1.00			Synovial mem	Pancreas	Testis
19344	809869	AA455133	3.64	21.53	5.92	2.00	0.00	2	821.3		Blood	Lymph
19345	50460	H16789	11.48	61.29	5.34	2.00	0.00	8	401.31	Brain	Pooled	Ovary
19352	826981	AA521371	6.74	48.35	7.18	3.00	0.00			Adrenal gland	Tonsil	Pool
19353	50578	H16821	7.39	41.20	5.57	1.00	0.00	17	430.97	Germ Cell	Brain	
19370	614915	AA465704	5.24	28.01	5.34	1.00	0.00				Adrenal gland	Tonsil
19396	293759	N53994	6.84	52.22	7.63	1.00	1.00	9	402.66	Prostate	Kidney	Germ Cell
19407	506548	AA706036	49.30	481.46	9.36	3.00	0.00	12	198.32		Thyroid	Parathyroid
19407	292936	N63744	19.30	102.33	5.25	0.00	0.00	22	17.11	Marrow	Thyroid	Breast
19416	176922	H48148	5.69	85.99	14.35	3.00	0.00	18	-13.12	Aorta	Forebrain	Whole embryo
19423	293240	N68679	7.73	107.83	13.96	1.00	0.00	6	104.35	Testis	Whole embryo	Pool
19426	1046230	AA620715	4.56	39.72	8.72	2.00	0.00					
19447	293798	N65971	694.00	3630.13	5.55	1.00	0.00					
19450	757500	AA426352	20.51	103.76	5.06	1.00	0.00					
19458	1046030	AA778663	16.14	110.73	6.86	1.00	2.00					

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19464	190669	H38945	3.88	19.97	5.14	1.00	0.00	8	510.24	Eye	Lung	Testis
19466	1022387	AA779449	4.76	65.39	13.75	1.00	0.00					
19468	182818	HA5266	39.99	497.49	12.76	0.00	1.00			CNS	Blood	Breast
19474	1032405	AA779457	5.18	41.88	8.08	0.00	1.00			Whole embryo	Poo	LID not found
19487	293091	N86070	10.19	68.28	5.72	0.00	2.00					
19492	435890	AA701411	70.96	1287.85	18.15	2.00	0.00					
19497	395902	AA757468	13.64	206.60	13.14	2.00	0.00			Fore skin	Eye	Placenta
19498	291548	N87797	306.37	2236.56	7.30	1.00	0.00					
19500	435894	AA701412	3.97	22.64	5.75	1.00	0.00					
19508	435919	AA701848	12.50	77.52	6.20	1.00	0.00			Fore skin	Synovial mem	Stomach
19509	725489	AA388521	117.65	703.27	5.98	1.00	0.00	8	437.79	CNS	LID not found	Other
19510	274531	N68156	229.77	1839.69	8.01	2.00	0.00	7	445.14	Aorta	Whole embryo	Fore skin
19515	324386	W46769	22.85	173.34	7.59	1.00	0.00	15	111.97	Tonsil	Eye	Spleen
19517	725707	AA394197	6.39	32.01	5.01	1.00	0.00	X	305.02			
19528	450515	AA704222	23.90	707.14	29.59	4.00	0.00					
19541	735559	AA393441	35.05	202.13	7.35	1.00	0.00					
19545	336148	AA257609	182.78	1278.29	6.99	1.00	0.00					
19547	324598	W46783	19.40	120.29	6.17	1.00	0.00	7	683.81	Skin	Thyroid	Ear
19549	723552	AA393443	12.88	68.32	5.26	1.00	0.00					
19553	398188	AA757808	14.45	73.89	5.11	1.00	0.00					
19560	450598	AA704587	12.75	102.82	8.07	1.00	2.00					
19564	433687	AA703208	17.81	117.64	6.81	2.00	0.00			Muscle	Lymph	Tonsil
19565	723622	AA283208	20.32	109.71	5.35	1.00	0.00			Gall bladder	Ear	CNS
19566	278460	N46782	18.22	101.86	5.56	0.00	1.00					
19569	360885	AA757711	30.61	188.23	5.51	1.00	2.00					
19572	435970	AA703198	11.80	64.14	5.43	1.00	0.00					
19577	358098	AA757717	4.48	27.92	6.21	0.00	1.00					
19578	257323	N28928	11.45	146.03	12.90	4.00	0.00	15	276.84	Small intestine	Ear	Cobon
19584	450680	AA682642	32.28	222.13	8.84	2.00	2.00			Eye	Heart	Testis
19585	825302	AA504457	335.74	1853.08	5.52	1.00	0.00	11	388.12	Thymus	Synovial mem	Ovary
19592	814443	AA459249	31.57	189.49	5.37	2.00	0.00	4	351.12	Spleen	Tonsil	Bone
19593	825386	AA504248	171.83	951.18	5.54	2.00	0.00	12	288.82	Smooth musc	Umbilical cord	Thymus
19594	703916	AA279060	3.98	45.50	11.44	1.00	0.00					
19598	825394	AA504250	31.48	205.75	6.54	2.00	0.00	1	95.35	Neural	Thymus	Bone
19599	703930	AA279133	4.12	35.81	8.70	1.00	0.00	22	67.29	Tonsil	LID not found	Other
19600	614501	AA459358	56.45	383.07	8.79	1.00	0.00					
19603	745131	AA626705	7.74	73.27	0.47	4.00	0.00					
19616	814584	AA480894	20.83	116.87	5.61	0.00	1.00	5	-8.58	Fore skin	Uterus	Thyroid
19642	725076	R88709	150.38	788.35	5.23	1.00	0.00	10	475.18	Whole embryo	Placenta	Poo
19647	150118	H01853	3.08	27.68	8.98	2.00	0.00			Head and nec	Blood	Thymus
19650	811770	AA463446	37.19	206.53	5.55	1.00	0.00	5	652.21	Adipose	Germ Cell	Blood
19654	195079	R91148	3.10	63.02	20.33	1.00	0.00	11	63.17	Poo	LID not found	Other
19656	382346	AA063459	16.20	92.49	5.71	1.00	0.00			Brain	LID not found	Other
19658	1046485	AA621138	59.41	300.23	5.05	0.00	1.00			Poo	Lung	LID not found
19663	150135	H01928	44.37	332.06	7.48	1.00	0.00	1	711.71	Ear	CNS	Kidney
19674	647886	AA205403	13.33	79.48	5.96	1.00	0.00			Testis	LID not found	Other
19682	898161	AA389348	0.45	113.95	17.02	1.00	0.00			Kidney	LID not found	Other
19683	135627	R31587	14.11	84.65	6.00	1.00	0.00	14	143.58	Placenta	Brain	LID not found
19684	382552	AA018412	182.91	937.41	5.13	1.00	0.00	2	435.25	Eye	LID not found	Other
19687	148895	H00650	20.21	216.02	10.66	1.00	1.00	3	391.77	Small intestine	Aorta	Placenta
19692	362748	AA018232	26.15	135.31	5.17	0.00	1.00	8	371.86	Eye	Adipose	Gall bladder
19694	196037	R89363	76.83	508.22	6.61	2.00	0.00	22	50.72			
19710	195786	R89287	6.64	52.57	7.91	2.00	0.00	3	151.6	Germ Cell	Breast	Poo
19711	150041	H01520	6.48	35.26	5.44	0.00	1.00	2	646.62	Placenta	Fore skin	LID not found

Table 2A

19728	195845	R62201	23.65	161.87	6.55	0.00	2.00	3	683.44	Pooled Brain	Muscle LID not found	Fore skin Other
19728	333528	AA678975	18.55	174.19	9.39	2.00	2.00					
19735	434684	AA701232	7.29	51.84	7.11	1.00	0.00	1	772.23			
19736	810600	AA458867	5.97	52.88	8.85	1.00	0.00	20	12.07	Thymus Tonsil CNS	Marrow Blood Bone	Thyroid Ovary Blood
19737	770569	AA434400	34.94	178.16	5.10	1.00	0.00					
19778	658019	AA252470	12.20	71.88	5.89	2.00	0.00					
19778	231922	AA6168	24.35	253.87	10.42	1.00	0.00					
19780	451808	AA706829	73.10	602.06	6.24	2.00	0.00	2	714.07	CNS	Colon	LID not found
19790	230158	N82206	397.34	2644.94	6.66	1.00	0.00	3	157.14	Thyroid	Stomach	Bone
19799	434972	AA700690	8.96	54.04	6.03	0.00	1.00	3	702.05	Uterus	Fore skin Kidney	
19800	701281	AA286819	18.44	165.74	8.99	3.00	0.00	22	50.72	Tonsil	Heart	Pancreas
19813	268385	N23400	8.08	235.61	20.12	3.00	0.00					
19816	703608	AA278320	22.66	173.94	7.87	1.00	2.00					
19820	451918	AA706964	64.35	419.91	6.50	0.00	0.00	1	252.77	Tonsil	LID not found	Other
19826	815048	AA465168	41.17	227.66	5.53	1.00	0.00					
19828	712202	AA280279	21.73	117.86	5.42	2.00	0.00					
19829	854691	AA630100	5.81	64.84	11.57	8.00	0.00					
19830	824508	AA490520	3.42	19.83	5.80	2.00	1.00					
19834	824526	AA408922	3.45	29.72	8.82	2.00	0.00	1	397.26	Thymus	Cervix	Blood
19843	694562	AA251354	10.93	61.42	5.82	1.00	0.00					
19845	855177	AA781508	34.68	283.21	7.59	1.00	0.00	12	469.49	Brain	Umbilical cord Heart	Breast Pancreas
19850	824643	AA491295	3.84	20.65	5.38	1.00	0.00					
19858	824647	AA491297	32.01	168.79	5.27	2.00	0.00					
19862	824681	AA432382	44.47	296.64	6.67	1.00	0.00					
19872	824510	AA490522	40.11	217.89	6.18	1.00	0.00	9	416.74	Cervix	Spleen	Kidney
19887	284092	N88510	12.82	79.85	6.33	1.00	0.00	11	67.54	Eye	Eye	Brain
19888	180753	H36660	0.86	9.40	9.91	1.00	0.00	12	133.86	Adipose	Lung	Adipose
19902	825325	AA504478	12.81	113.56	8.87	5.00	0.00	7	253.84	Pooled	Pool	LID not found
19907	208867	H83763	286.01	1511.84	5.29	1.00	0.00					
19911	284225	N70582	18.15	110.69	5.78	1.00	0.00					
19912	190972	H37509	33.13	184.71	5.58	2.00	0.00					
19914	878182	AA775447	60.55	451.22	7.45	3.00	0.00					
19919	284244	N70588	8.43	87.21	11.53	1.00	0.00	14	249.31	Kidney	Pool	LID not found
19922	676564	AA775872	27.38	216.60	7.91	0.00	1.00					
19943	294578	N71049	4.01	182.50	45.50	5.00	0.00					
19947	208885	H60596	12.13	69.63	5.74	0.00	2.00	1	736.3	Thyroid	Uterus	Pool
19950	825785	AA505117	3.00	16.63	5.54	1.00	0.00					
19959	398111	AA757732	61.11	323.67	5.30	2.00	0.00					
19978	256375	N30222	300.42	1776.87	5.92	1.00	0.00					
19985	368147	AA757818	220.45	1642.16	7.45	1.00	0.00	12	479.72	Whole embryo	Gall bladder	Whole embryo
19984	256383	N30225	26.98	160.73	6.19	1.00	0.00	3	475.36	Fore skin	Fore skin	
19985	324772	W46944	107.89	724.24	6.71	0.00	1.00					
20001	356237	AA756451	13.94	75.10	5.39	1.00	0.00					
20006	279673	N48988	20.37	108.99	5.35	0.00	1.00					
20012	436070	AA700811	5.73	80.26	14.01	0.00	1.00	20	207.12	Germ Cell	Eye	Breast
20013	739084	AA421603	11.89	65.19	5.48	2.00	0.00					
20019	325029	W49620	7.79	66.40	7.11	1.00	0.00	20	339.91	Brain	Pooled	Ovary
20021	739116	AA421515	9.53	91.66	9.64	1.00	0.00	1	830.22	Brain	Whole embryo	Blood
20022	279824	N40968	7.08	77.61	10.96	4.00	0.00					
20023	430510	AA680367	4.68	46.16	9.88	1.00	0.00					
20045	739230	AA421335	14.96	220.88	14.78	2.00	0.00					
20050	357452	N30258	17.35	159.44	9.19	1.00	0.00	6	352.18	Parathyroid	LID not found	Other
20059	343780	W69271	9.09	47.75	5.25	1.00	0.00					
20060	449034	AA777384	3.10	111.29	35.90	8.00	1.00					

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20456	257989	N27066	5.89	54.28	9.21	1.00	0.00	1	689.84	CNS	Pool	Brain
20464	450781	A4704815	13.08	116.57	9.06	1.00	0.00	12	227.83	Blood	Ovary	Colon
20473	386358	A4758378	8.66	75.36	11.31	2.00	0.00	3	191.7	Bone	Placenta	Tonsil
20483	740817	A4477404	10.63	96.11	5.16	1.00	0.00	11	271.75	Adipose	Breast	Colon
20485	278837	N36839	9.10	47.15	6.18	0.00	1.00	19	34.81	Heart	Ovary	Pool
20487	430687	A4677880	4.51	35.47	7.87	1.00	0.00	11	60.76	Testis	Blood	Adrenal gland
20488	450877	A4682671	7.02	65.48	9.33	2.00	0.00	11	202.79	Heart	Pool	LID not found
20489	343974	N70055	39.72	635.05	15.99	1.00	0.00	6	565.13	Stomach	Placenta	Whole embryo
20501	740780	A4477283	21.46	194.11	9.04	5.00	0.00	11	57.07	CNS	Germ Cell	Breast
20505	396829	A4756152	13.05	72.05	5.52	0.00	1.00	11	274.11	Placenta	Colon	Eye
20510	278915	N75730	61.90	392.01	6.33	2.00	0.00	13	228.92	Eye	Placenta	LID not found
20516	344764	N74701	18.44	105.59	5.73	1.00	0.00	12	442.05	Nose	Tonsil	Lymph
20517	741842	A4402875	26.57	139.92	5.27	1.00	0.00	4	24.02	Ear	CNS	Adrenal gland
20528	450859	A4682623	5.63	31.02	5.32	1.00	0.00	10	345.56	Eye	CNS	Placenta
20530	258859	N32895	419.37	2106.54	5.02	1.00	0.00	18	27.41	Kidney	Pool	Brain
20531	344184	N68743	8.27	65.65	7.94	1.00	0.00	20	62.12	Pool	LID not found	Other
20533	741700	A4402966	27.51	166.36	6.16	2.00	0.00	22	-7.8	Placenta	Prostate	Kidney
20538	258884	N32904	16.78	110.89	6.61	0.00	1.00	1	31.2	Eye	Cervix	Blood
20540	449257	A4777700	0.83	11.09	13.34	1.00	0.00	17	103.59	Whole embryo	Ovary	Uterus
20541	741918	A4402940	4.49	101.01	22.81	1.00	0.00	5	110.31	Parathyroid	Uterus	Placenta
20549	774805	A4427824	29.57	1015.21	34.33	6.00	1.00	10	538.48	CNS	Tonsil	Placenta
20554	815538	A4457039	4.43	26.35	6.94	1.00	0.00	6	143.7	Pool	Whole embryo	Germ Cell
20548	782501	A4431772	9.18	48.57	5.20	0.00	1.00	5	354.46	Lymph	Foreskin	Brain
20550	713078	A4282871	0.54	4.09	7.55	2.00	0.00	X	273.05	Muscle	Tonsil	Brain
20591	878231	A4757774	31.36	244.57	7.80	1.00	0.00	15	227.19	Foreskin	Pooled	Aorta
20594	878681	A4753364	1172.86	21731.63	10.53	2.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20595	135506	R34566	15.40	163.71	10.97	2.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20596	383087	A4019338	19.41	111.52	5.74	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20598	197208	R92812	15.46	173.84	11.23	2.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20603	136508	R34568	9.51	221.14	23.25	3.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20628	705084	A4278690	35.55	439.50	12.36	0.00	1.00	19	227.19	Foreskin	Pooled	Aorta
20631	151597	H93855	7.86	108.69	13.63	2.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20644	384022	A4021586	8.78	74.80	8.52	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20646	197359	R86764	150.83	875.40	5.81	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20648	197648	R94485	236.31	1544.84	6.34	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20652	152270	H04757	9.42	53.49	5.68	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20653	197651	R94504	12.18	114.79	9.41	2.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20670	197651	A4702714	32.89	232.08	7.06	1.00	2.00	19	227.19	Foreskin	Pooled	Aorta
20672	383330	A4021183	1.78	14.87	8.34	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20678	384108	R94542	10.67	58.19	5.31	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20678	197127	R93591	45.41	295.17	6.50	0.00	2.00	19	227.19	Foreskin	Pooled	Aorta
20686	187731	N51367	18.81	163.53	8.69	2.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20690	283208	N74679	5.53	46.54	8.42	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20694	298702	H96554	252.89	2073.64	8.20	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20697	250863	N51388	46.71	234.51	5.02	0.00	1.00	19	227.19	Foreskin	Pooled	Aorta
20698	263233	AA417022	26.94	449.11	16.67	7.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20712	745169	H97701	382.05	2355.42	6.51	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20713	251569	AA699914	11.78	69.61	5.63	3.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20719	435303	AA417761	24.44	201.18	8.23	2.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20720	748245	AA417761	24.44	201.18	8.23	2.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20724	452134	AA707225	24.37	156.21	8.41	0.00	1.00	19	227.19	Foreskin	Pooled	Aorta
20729	251127	H97851	15.08	168.50	11.03	0.00	1.00	19	227.19	Foreskin	Pooled	Aorta
20733	270558	N32336	16.23	97.80	5.36	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta
20735	435311	AA700758	105.71	541.48	5.12	0.00	1.00	19	227.19	Foreskin	Pooled	Aorta
20754	283413	N50632	4.31	25.58	5.93	1.00	0.00	19	227.19	Foreskin	Pooled	Aorta

Table 2A

21406	23319	R39446	4.55	39.34	8.84	7.00	0.00	21	263.74	Ignore	Stomach	Adrenal gland
21408	275372	R85509	5.88	38.82	6.45	1.00	0.00	22	91.16	Eye	LID not found	Other
21409	412911	AA707714	5.88	183.98	30.74	2.00	0.00	10	371.25	Umbilical cord	Tonsil	Germ Cell
21413	755304	AA436327	32.75	393.06	12.00	2.00	0.00	17	492.17	Smooth muscle	Breast	Blood
21417	412927	AA707728	5.85	31.01	11.07	1.00	0.00	14	192.76	Kidney	Tonsil	Lung
21420	449438	AA677848	0.86	47.88	14.35	6.00	0.00	2	136.02	CNS	Lung	LID not found
21423	430954	AA678318	3.34	47.88	14.35	6.00	0.00	17	304.45	CNS	Pool	LID not found
21427	399331	AA774649	12.86	89.31	6.93	0.00	1.00	19	233.3	Neural	Testis	Ovary
21455	431001	AA677820	2.28	14.99	6.57	1.00	0.00	17	383.22	Epithelium	CNS	Ovary
21456	451092	AA704608	13.14	83.28	6.34	1.00	0.00	6	489.21	Pool	Eye	Breast
21462	280784	N50655	11.17	57.02	6.00	2.00	0.00	2	684.28	Smooth muscle	CNS	Far
21465	412881	AA707696	91.41	511.77	5.80	1.00	0.00	2	684.28	Colon	Breast	Germ Cell
21470	290785	N50651	5.55	31.34	5.84	1.00	0.00	2	684.28	Uterus	CNS	Blood
21471	431007	AA677923	1.08	15.03	13.98	2.00	0.00	17	383.22	Epithelium	CNS	Ovary
21482	277173	N34318	6.07	363.84	59.90	5.00	1.00	6	489.21	Pool	Eye	Breast
21483	398444	AA732817	2.33	15.90	6.83	2.00	0.00	19	233.3	Neural	Testis	Ovary
21484	450058	AA703391	4.27	37.31	8.74	3.00	0.00	17	383.22	Epithelium	CNS	Ovary
21485	756450	AA482127	21.64	116.57	5.30	1.00	0.00	6	489.21	Pool	Eye	Breast
21486	280592	N50406	8.63	78.33	9.30	2.00	0.00	2	684.28	Smooth muscle	CNS	Far
21487	431028	AA758470	0.70	6.18	8.89	1.00	0.00	17	383.22	Epithelium	CNS	Ovary
21492	450064	AA703393	10.94	65.13	5.95	2.00	0.00	6	489.21	Pool	Eye	Breast
21493	756463	AA4356401	8.35	694.94	83.19	7.00	0.00	19	233.3	Neural	Testis	Ovary
21494	280602	N47388	7.82	97.12	12.42	5.00	1.00	17	383.22	Epithelium	CNS	Ovary
21501	736471	AA4356405	3.18	31.53	9.93	4.00	0.00	6	489.21	Pool	Eye	Breast
21503	431260	AA682624	8.24	43.70	5.30	1.00	0.00	2	684.28	Smooth muscle	CNS	Far
21504	451161	AA704749	6.38	33.20	6.20	1.00	0.00	17	383.22	Epithelium	CNS	Ovary
21509	465204	AA676907	28.71	235.20	8.19	3.00	1.00	6	489.21	Pool	Eye	Breast
21510	746097	AA482007	14.25	115.03	8.07	1.00	0.00	2	684.28	Smooth muscle	CNS	Far
21512	815847	AA485234	3.82	18.38	5.13	2.00	0.00	19	233.3	Neural	Testis	Ovary
21517	459941	AA778390	7.62	96.82	7.26	1.00	0.00	17	383.22	Epithelium	CNS	Ovary
21526	748072	AA482031	17.80	157.09	8.83	2.00	0.00	6	489.21	Pool	Eye	Breast
21528	824082	AA491212	5.45	37.54	6.89	3.00	0.00	2	684.28	Smooth muscle	CNS	Far
21529	462188	AA705423	4.72	42.70	9.04	4.00	0.00	19	233.3	Neural	Testis	Ovary
21535	897033	AA676768	0.98	15.66	16.05	1.00	0.00	17	383.22	Epithelium	CNS	Ovary
21537	471835	AA035137	31.83	293.57	9.22	2.00	0.00	6	489.21	Pool	Eye	Breast
21532	874126	AA490611	13.61	72.72	5.34	0.00	2.00	19	233.3	Neural	Testis	Ovary
21554	128202	R11498	19.15	155.17	8.10	1.00	3.00	14	18.43	Spleen	Lymph	Germ Cell
21563	134527	R83313	10.77	80.83	7.51	2.00	0.00	19	233.3	Neural	Testis	Ovary
21568	384387	AA708876	4.04	23.34	5.78	1.00	0.00	2	684.28	Smooth muscle	CNS	Far
21571	136693	R63497	9.18	224.10	24.40	9.00	0.00	19	233.3	Neural	Testis	Ovary
21586	128758	R16837	22.80	118.52	5.18	0.00	1.00	19	233.3	Neural	Testis	Ovary
21591	153977	R87817	7.79	58.72	7.34	0.00	1.00	2	684.28	Smooth muscle	CNS	Far
21595	140018	R63971	4.58	23.00	5.02	1.00	0.00	19	233.3	Neural	Testis	Ovary
21598	331021	AA057425	10.98	161.82	14.73	5.00	0.00	2	684.28	Smooth muscle	CNS	Far
21598	200398	R97220	5.59	123.07	22.03	2.00	2.00	18	42.65	Pool	LID not found	Other
21598	154998	R54733	12.59	83.27	6.61	2.00	0.00	18	269.05	Prostate	Fore skin	Pool
21602	128792	R16760	19.28	178.31	9.24	0.00	1.00	18	269.05	Prostate	Fore skin	Pool
21610	128948	R10276	77.83	399.86	5.15	0.00	1.00	18	269.05	Prostate	Fore skin	Pool
21612	381038	AA054843	12.52	171.44	13.70	5.00	1.00	7	207.77	Eye	Blood	Ovary
21620	381054	AA054439	0.86	7.30	6.46	2.00	0.00	22	135.83	Ear	Breast	Ovary
21623	154483	R54872	52.54	315.62	6.01	0.00	2.00	15	207.64	Pool	LID not found	Other
21630	203352	H54786	5.99	30.54	5.10	1.00	0.00	6	385.68	Placenta	LID not found	Other
21634	128375	R12708	95.56	611.04	6.35	0.00	2.00	6	385.68	Placenta	LID not found	Other
21635	139766	R62371	4.40	22.88	5.16	1.00	0.00	6	385.68	Placenta	LID not found	Other
21646	203178	H54859	98.59	682.95	6.92	0.00	1.00	6	385.68	Placenta	LID not found	Other

Table 2A

21652	452512	AA778756	21.55	170.87	7.93	2.00	3.00	Stomach	Adrenal gland	
21654	306540	N91821	28.82	155.25	5.39	1.00	1.00			
21655	436488	AA701351	28.64	178.27	8.22	2.00	0.00	Adipose	Bone	CNS
21660	452337	AA778825	42.82	247.13	5.77	0.00	1.00			
21665	262895	H98415	33.02	220.86	6.69	0.00	1.00			
21668	452563	AA778846	3.84	46.19	12.82	7.00	0.00			
21669	271799	N31605	3.68	45.47	12.38	1.00	2.00	87.69 Lymph node	Tonsil	Forebrain
21679	435493	AA701381	39.41	218.95	5.55	0.00	2.00			
21683	432321	AA695410	5.09	54.56	10.73	1.00	0.00	Lung	Pool	LID not found
21702	306861	N79081	18.65	189.27	10.15	3.00	4.00	43.42 Foreskin	Brain	Pool
21705	263076	N20054	32.43	219.08	6.75	0.00	1.00			
21711	435536	AA701600	8.60	74.47	8.68	0.00	2.00			
21715	433284	AA699707	6.14	54.25	8.83	5.00	0.00	Peripheral ner	Thyroid	Cervix
21722	288873	N82400	14.19	124.53	8.78	1.00	0.00			
21728	815047	AA651665	73.51	403.09	5.57	1.00	0.00			
21732	452708	AA779251	2.39	25.41	10.82	3.00	0.00	126.7 Testis	CNS	Tonsil
21736	280705	N82418	4.13	44.30	10.73	2.00	0.00			
21743	435537	AA701909	12.26	65.14	6.95	0.00	1.00			
21749	848857	AA629910	50.87	301.44	5.95	1.00	0.00	375.08 Muscle	Whole embryo	LID not found
21750	825404	AA504253	12.11	132.39	10.83	2.00	0.00	546.63 Placenta	Tonsil	Colon
21755	700967	AA287828	4.61	25.64	5.34	1.00	0.00	Periaryoid	Breast	Placenta
21763	701103	AA287318	60.93	308.81	5.07	1.00	0.00	Uterus	LID not found	Other
21776	460143	AA676885	25.80	138.48	5.41	2.00	0.00	Pool	CNS	Pancreas
21778	825668	AA505063	18.99	105.40	5.55	1.00	0.00	133.08 Liver	Tonsil	
21779	701256	AA286807	2.04	19.22	8.81	1.00	0.00	430.22 CNS	Pool	Kidney
21783	701272	AA286814	2.74	16.04	5.85	1.00	0.00	Testis	Pool	LID not found
21792	460270	AA677620	8.40	58.90	8.78	1.00	0.00	634.12 Brain	Lung	LID not found
21796	174311	H23959	11.79	169.28	14.38	4.00	0.00	Synovial mem	Stomach	Tonsil
21802	814942	AA465521	6.71	63.81	8.82	2.00	0.00	169.07 Esophagus	Stomach	Breast
21806	586650	AA129133	15.85	102.40	6.54	3.00	2.00	43.68 Ignora	Cervix	Skin
21808	360232	AA013098	14.62	155.70	10.85	1.00	0.00	209.43 Eye	Muscle	Thymus
21814	844511	AA655338	31.84	167.14	5.28	1.00	0.00	203.08 Adrenal gland	Lymph	LID not found
21840	360761	AA629999	131.90	1183.22	8.87	2.00	1.00	788.49 Ear	Cervix	Germ Cell
21850	502141	AA017104	28.95	141.83	5.26	2.00	1.00	314.08 Eye	Spleen	Pancreas
21851	245396	AA127014	72.70	713.81	8.81	1.00	0.00	Pool	LID not found	Other
21855	360644	AA015818	156.73	801.15	5.11	3.00	1.00	215.88 Eye	Pool	Placenta
21859	245421	N52483	4.01	21.26	6.30	1.00	0.00	507.85 Nose	Blood	Colon
21879	132326	R26283	4.26	64.80	15.16	2.00	0.00			
21882	685801	AA262080	9.79	54.04	5.82	1.00	0.00	43.66		
21888	413068	AA707785	17.45	117.89	8.75	2.00	0.00	226.49 CNS	Germ Cell	Brain
21890	273348	N57487	22.48	113.29	5.04	0.00	1.00			
21894	280640	N50428	7.18	42.62	5.94	1.00	0.00			
21896	451169	AA704752	32.99	177.79	5.39	1.00	0.00			
21897	412887	AA707647	11.15	135.63	12.19	2.00	0.00			
21902	280689	N47445	37.81	272.20	7.18	1.00	0.00	166.87 CNS	Stomach	Colon
21905	412880	AA707741	3.82	24.85	6.51	1.00	0.00			
21908	430041	AA703383	43.21	340.46	7.86	2.00	0.00			
21910	280782	N50654	14.66	321.26	21.86	14.00	0.00	428.08		
21927	431245	AA682545	15.97	111.18	6.86	2.00	0.00	371.88 Eye	Adipose	Cell bladder
21934	281103	N50935	37.48	223.81	5.97	2.00	0.00	557.95 Adrenal gland	Forebrain	CNS
21935	412883	AA682583	9.45	58.70	6.21	0.00	2.00	115.96 Eye	Pool	LID not found
21939	415483	N80457	14.85	75.37	5.08	0.00	1.00	201.91 Whole embryo	Tonsil	Pool
21944	451397	AA707171	5.53	42.42	7.53	2.00	0.00			
21949	768653	AA425781	1.25	15.47	12.36	2.00	0.00	89.74		

Table 2A

21958	450111	AA703518	4.28	27.84	6.50	1.00	0.00	Esophagus	Thyroid
21957	769873	AA429341	74.39	411.82	3.94	1.00	0.00	Adrenal gland	Kidney
21956	280908	N50828	24.95	145.71	5.84	1.00	0.00	CNS	
21987	431381	AA706982	7.39	43.27	5.88	3.00	0.00	Thyroid	Cervix
21974	280582	N50859	14.79	97.01	6.56	1.00	0.00	Skin	Spleen
21875	431301	AA562637	17.31	241.89	13.88	1.00	1.00	Breast	Colon
21979	415889	W60724	13.09	86.58	6.81	1.00	1.00	Uterus	Lung
21987	691778	AA677850	9.72	102.35	10.63	5.00	0.00	-1.01 Pooled	Blood
21989	488288	AA043945	8.47	51.44	7.95	4.00	0.00	Muscle	CNS
21988	248386	R38923	8.33	42.37	5.08	1.00	0.00	Thyroid	Germ Cell
22008	824280	AA481256	6.73	41.24	6.13	1.00	0.00	Parathyroid	Uterus
22009	488401	AA043772	12.48	70.81	5.64	2.00	0.00	Bone	Forebrain
22011	25864	R38924	15.88	196.59	12.40	2.00	0.00	Tonsil	Kidney
22022	814001	AA485854	2.61	13.25	5.07	1.00	0.00	Tonsil	Forebrain
22032	824378	AA486896	5.12	32.42	6.33	2.00	0.00	251 Adrenal gland	Germ Cell
22034	129032	R10382	20.56	335.32	16.31	8.00	0.00	Stomach	Colon
22039	155542	R171738	578.75	3252.22	5.94	1.00	0.00	Pool	LID not found
22040	392405	AA708201	9.84	67.41	6.85	3.00	0.00	Pool	LID not found
22042	128125	R10890	12.14	129.30	10.65	2.00	0.00	Pool	LID not found
22051	140008	R04888	4.45	97.65	21.94	2.00	0.00	Pool	LID not found
22056	382444	AA708001	17.91	112.11	6.26	1.00	0.00	Adrenal gland	Placenta
22059	140107	R65893	7.40	78.55	10.62	1.00	0.00	Pool	LID not found
22068	180256	H29858	167.05	964.71	5.78	1.00	0.00	Pool	LID not found
22074	129447	R11217	21.56	115.54	5.38	0.00	1.00	Pool	Placenta
22079	140816	R63387	4.94	25.37	5.13	1.00	0.00	Eye	LID not found
22082	221976	H65336	11.29	56.51	5.01	1.00	0.00	Eye	LID not found
22084	203878	H56463	67.37	356.94	5.30	1.00	0.00	Brain	LID not found
22088	129813	R16555	2.72	54.36	23.69	1.00	0.00	Tonsil	Pool
22108	129829	R16566	40.69	208.49	5.12	1.00	1.00	Pool	LID not found
22112	392830	AA708301	3.13	15.98	5.10	1.00	0.00	Pool	LID not found
22120	392841	AA708327	31.08	173.96	5.60	0.00	2.00	Forebrain	Blood
22124	150325	H29897	6.74	85.83	12.73	1.00	2.00	Thyroid	Forebrain
22126	204790	H57105	35.30	310.87	8.81	1.00	0.00	Small intestine	Pancreas
22127	155920	R72380	20.95	304.50	14.54	1.00	1.00	Thymus	Synovial mem
22128	264747	N21015	61.97	328.67	5.27	1.00	0.00	Parathyroid	Tonsil
22130	268770	N62489	9.33	65.65	7.04	1.00	0.00	Forebrain	Codon
22134	1239440	AA705988	10.72	56.84	5.28	1.00	0.00	CNS	Whole embryo
22137	264575	N20322	11.18	108.90	9.75	2.00	0.00	Forebrain	Whole embryo
22141	272140	N35469	34.42	204.38	5.94	2.00	0.00	Forebrain	Whole embryo
22142	1239945	AA705977	5.98	60.32	10.05	2.00	0.00	CNS	Parathyroid
22146	280840	N62593	21.57	157.63	7.31	1.00	0.00	CNS	Parathyroid
22162	288998	N62728	12.96	88.66	5.30	1.00	0.00	Blood	Placenta
22184	454150	AA677215	50.68	298.39	5.73	0.00	2.00	Pool	LID not found
22186	322184	W37782	232.82	1329.29	5.71	1.00	0.00	Thymus	Synovial mem
22185	265103	N21338	7.07	130.11	19.40	7.00	0.00	Thymus	Adrenal gland
22187	433465	AA699567	2.80	14.49	5.17	1.00	0.00	Germ Cell	Forebrain
22189	727507	N35825	30.51	158.83	5.21	0.00	1.00	Nose	Whole embryo
22192	823954	AA480843	84.81	440.38	5.19	1.00	0.00	Spleen	Esophagus
22235	701411	AA307849	84.72	437.84	5.17	2.00	0.00	Blood	Prostate
22241	698979	AA176842	50.05	280.51	5.60	1.00	0.00	Tonsil	Eye
22244	461383	AA704608	220.25	1627.68	7.39	1.00	0.00	Tonsil	Parathyroid
22247	701461	AA328764	0.85	4.94	5.84	1.00	0.00	Spleen	Prostate
22254	825845	AA504778	17.71	98.80	5.58	1.00	0.00	Whole embryo	Kidney
22256	461438	AA705219	159.89	1002.48	6.37	1.00	0.00	Whole embryo	Kidney
22263	701677	AA3287087	1107.28	5811.35	5.25	2.00	0.00	Whole embryo	Kidney

Table 2A

22264	461499	AA705072	45.33	260.94	5.76	4.00	0.00
22267	701690	AA287090	3.31	28.93	9.04	0.00	1.00
22268	461509	AA705077	3.33	18.16	5.46	1.00	0.00

Table 2B

#	IMAGE_ID	Gen Bank Accession Number	Ave-Normal- expression	Max- expression-of- 23tumors	Max-fold-up	Count-up tumors	Count-up cell lines	Chromosome	Location	Tissue 1	Tissue 2	Tissue 3
2450	840887	AA488073	9.89	778.51	73.68	23.00	2.00	1	538.46	Stomach	Nose	Pancreas
4003	825085	AA489246	7.02	195.43	27.84	23.00	1.00	1	538.46	Pancreas	Gall bladder	Colon
6359	236034	H61243	21.79	621.89	28.53	23.00	2.00	11	268.99	Smooth musc	Spleen	Lymph
8658	770388	AA430665	5.21	182.53	35.08	23.00	1.00	7	424.99	Larynx	Breast	Pancreas
9183	841645	AA457488	12.17	906.98	74.51	23.00	1.00	17	48.77	Ovary	Unilateral cord	Colon
10822	223350	H66564	3.16	372.02	117.55	23.00	2.00	8	428.08	Gall bladder	Liver	Ovary
11150	270385	N33063	8.00	1136.23	141.94	23.00	3.00			Forebrain	Testis	Brain
14080	37310	R49597	7.33	920.13	125.57	23.00	5.00	3	628.88	Parathyroid	Pool	Unilateral cord
14508	625011	AA181023	8.30	735.73	79.13	23.00	5.00	3	628.88	Adipose	Colon	Pancreas
15113	594684	AA171760	8.39	166.58	19.86	23.00	4.00	8	463.73	Stomach	Stomach	Parathyroid
16723	813730	AA453783	14.01	602.63	47.31	23.00	2.00	8	463.73	Thyroid		
18699	132636	R26785	4.51	127.22	29.21	23.00	1.00			Larynx	Germ Cell	Parathyroid
20289	250678	H65976	4.72	520.06	110.25	23.00	3.00					

Table 2C

#	IMAG _{CL}	Gen Bank Accession Number	Ave-Normal	Max- expression	Max-Fold-Up	Count-up lumors	Count-up cell lines	Chromosome	Location	Tissue 1	Tissue 2	Tissue 3
20289	250878	H95976	4.72	520.05	110.25	23.00	1.00			Larynx	Germ Cell	Parathyroid
14080	37310	R49597	7.33	820.13	125.57	22.00	4.00			Parathyroid	Pool	Brain
1618	770810	AA433851	2.57	284.36	110.73	22.00	3.00	1	671.44	Esophagus	Adipose	Colon
14808	825011	AA181023	9.30	735.73	76.13	22.00	3.00	3	628.88	Adipose	Unbilical cord	Pancreas
11150	270385	N33083	8.00	1136.23	141.94	22.00	2.00			Forekin	Placenta	Testis
19109	824894	AA488892	5.51	745.77	135.40	22.00	2.00			Blood	Muscle	Tonsil
4003	825085	AA489246	7.02	185.43	27.84	22.00	1.00			Pancreas	Gall bladder	Colon
8658	770368	AA430685	5.21	182.53	35.05	22.00	1.00	7	424.99	Larynx	Breast	Pancreas
9183	841645	AA487488	12.17	905.98	74.51	22.00	1.00	17	48.77	Ovary	Unbilical cord	Colon
10559	296488	N70208	3.43	450.58	131.56	22.00	1.00			Forekin	CNS	Pool
2450	840887	AA486073	9.89	778.31	76.68	22.00	0.00	1	538.46	Stomach	Nose	Pancreas
10822	223350	H88554	3.16	372.02	117.58	21.00	2.00	8	426.08	Gall bladder	Liver	Ovary
1335	788875	AA451904	17.58	4827.42	280.58	21.00	1.00	20	255.21	Epididymis	Ovary	Thyroid
7791	415562	W60701	5.98	359.44	60.12	20.00	1.00			Neural	Pool	Brain
13279	279388	N48898	16.16	348.38	21.55	18.00	1.00					
14552	378461	AA775816	21.01	1800.75	90.45	18.00	1.00					
8359	236034	H61243	21.79	621.89	28.53	18.00	0.00	11	268.89	Smooth muscl	Spleen	Lymph
16723	813730	AA453783	14.01	662.63	47.31	17.00	2.00	8	463.73	Thyroid	Stomach	Parathyroid
3713	308889	W25368	4.33	150.67	34.82	17.00	1.00	1	562.73	Esophagus	Breast	Prostate
18699	132636	R26785	4.51	127.22	28.21	17.00	1.00					
4275	741138	AA402207	3.77	243.17	84.45	17.00	0.00	20	261.13	Nose	Bone	Ovary
2714	741497	AA401137	6.39	446.78	69.89	16.00	2.00	9	390	Head and nec	Bone marrow	Neural
15113	594884	AA171780	8.39	166.58	19.86	16.00	2.00			Stomach	Colon	Pancreas
851	809784	AA454743	3.79	396.88	104.82	16.00	1.00	19	274.67	Ovary	CNS	Colon
5927	767069	AA424516	9.20	240.93	26.18	16.00	0.00	11	400.33	Ear	Brain	Colon
6156	322223	W38022	3.13	60.77	19.44	16.00	0.00	9	357.89	Nose	Parathyroid	Pooled
21308	454970	AA676825	4.31	139.66	32.40	15.00	1.00	17	305.06	Placenta	Stomach	Prostate
4312	131839	R24635	5.99	571.41	102.25	15.00	0.00	11	282.87	Cervix	Ovary	Placenta
16071	1475659	AA672020	6.71	199.66	29.75	14.00	1.00			Pooled	Pancreas	Stomach
20559	773485	AA427824	29.57	1015.21	34.33	14.00	1.00	11	57.07	CNS	Adrenal gland	Placenta
6876	361323	AA075544	4.99	119.62	23.95	14.00	0.00	1	650.68	Stomach	CNS	Eye
21910	280752	N50854	14.88	321.26	21.88	14.00	0.00					
12787	595238	AA172430	6.79	94.50	13.92	13.00	2.00					
3220	897770	AA598508	16.06	632.20	39.37	13.00	1.00					
10549	810960	AA459401	8.17	580.56	68.60	13.00	1.00	19	274.87	Larynx	Ovary	Pancreas
11778	179183	H50114	7.60	498.55	65.33	13.00	1.00			Brain	Eye	LID not found
4228	511428	AA126115	4.84	114.71	23.69	13.00	0.00			Head and nec	Esophagus	Prostate
4414	72391	T51689	7.84	161.34	20.33	13.00	0.00					
6774	725321	AA281749	14.37	323.40	22.50	13.00	0.00			Neural	Adipose	Ear
10865	756931	AA426934	7.76	463.54	63.69	13.00	0.00	1	558.38	Muscle	Heart	Breast
4938	265483	W05026	124.53	3958.30	31.77	12.00	2.00			Lung	Pool	LID not found
4228	470393	AA031513	6.34	1318.45	207.75	12.00	1.00	11	348.77	Gall bladder	Pancreas	Uterus
4965	486278	AA044205	7.99	316.80	39.67	12.00	1.00	3	627.2	Uterus	CNS	Testis
21265	845345	AA773478	14.11	255.91	18.14	12.00	1.00					
12983	809998	AA454854	11.58	1193.03	103.05	12.00	0.00	1	305.09			
4282	667482	AA227594	2.85	781.29	274.41	11.00	2.00	2	334.7	Ear	Brain	Kidney
8450	246430	N53031	4.14	80.65	19.49	11.00	1.00	4	419.22		Pool	LID not found
5770	148225	H13688	9.30	108.55	11.68	11.00	1.00	2	545.17	Stomach	Placenta	Pancreas

Table 2C

10375	46173	H08098	15.28	1683.19	110.14	11.00	1.00	11	57.07 CNS	Adrenal gland Placenta
3908	289337	N92646	19.04	2000.27	105.08	11.00	0.00	14	278.45	Liver Lung
11362	286663	N62384	3.12	47.72	15.31	11.00	0.00	X	236.58 CNS	Heart Testis
15317	813719	AA453779	12.45	1464.63	117.63	11.00	0.00	1	687.01 Ovary	Colon
17777	951108	AA820466	7.05	104.77	14.85	11.00	0.00	4	86.17 Neural	Eye
17895	27544	R40057	4.47	518.74	115.48	11.00	0.00	2	412.17 Thyroid	Ovary
6804	742101	AA405891	14.87	288.69	19.68	10.00	3.00	11	67.01 Cell bladder	Liver
798	181456	H25546	5.22	244.53	48.84	10.00	1.00	6	172.31 Nose	Placenta
7366	810727	AA457718	9.53	277.32	29.09	10.00	1.00	3	411.77 Germ Cell	Brain
8280	82704	H29227	2.96	64.43	21.80	10.00	1.00	1	Thyroid	Muscle
10935	810911	AA459296	48.11	381.75	7.93	10.00	0.00	1	LID not found	Other
606	108323	T81872	14.03	280.23	19.99	10.00	0.00	3	671.26 Adipose	Ovary
825	770212	AA434115	10.84	390.36	33.25	10.00	0.00	7	694.79 CNS	Tonill
2421	201727	R99749	10.81	93.80	8.67	10.00	0.00	12	655.1 Parathyroid	Pancreas
2647	305808	N90248	2.26	30.08	13.30	10.00	0.00	20	347.38 Thyroid	Larynx
2695	204335	H59915	91.58	1116.13	12.19	10.00	0.00	1	333.71 Germ Cell	Prostate
4246	725680	AA395334	4.31	53.22	12.35	10.00	0.00	1	Thymus	Aorta
4573	347036	W81128	5.22	78.40	15.02	10.00	0.00	X	289.73 Neural	Adrenal gland
6238	232860	H73973	2.85	97.80	34.34	10.00	0.00	1	Lymph node	Thymus
9014	809503	AA454562	7.23	687.41	95.10	10.00	0.00	1	151.1 Ovary	Heart
11418	856447	AA630800	31.96	544.63	17.04	10.00	0.00	1	Larynx	Cervix
12134	724888	AA281484	3.75	119.61	31.82	10.00	0.00	1	Thymus	Colon
14932	1434905	AA857101	4.95	280.19	56.58	10.00	0.00	1	Nose	Pooled
21272	646753	AA205598	2.36	94.80	40.13	10.00	3.00	1	334.46 Kidney	Pool
7061	321908	W37680	5.20	98.20	18.89	9.00	2.00	9	301.18 Marrow	Lymph
8871	415229	W91879	4.29	180.46	42.05	9.00	0.00	2	576.48 Ovary	Adrenal gland
3214	823580	AA497051	8.05	136.70	18.87	9.00	1.00	16	352.18	Pool
5070	823580	AA497051	7.16	116.02	16.20	9.00	1.00	16	352.18	Blood
5089	897822	AA598572	2.62	301.01	114.81	9.00	0.00	18	24.9 Ovary	Heart
381	109123	T80978	5.98	60.86	10.19	9.00	0.00	6	534.12 Thymus	Pancreas
452	724112	AA411244	5.50	43.21	7.86	9.00	0.00	6	351.05 Smooth muscle	Thyroid
2330	194634	R55184	4.39	66.52	15.27	9.00	0.00	X	634.12 Ear	Pancreas
2802	843028	AA488406	9.55	337.36	35.33	8.00	0.00	6	117.89 Smooth muscle	CNS
4015	712341	AA405000	21.75	465.45	22.22	9.00	0.00	3	120.51 Lymph node	Esophagus
6007	143322	R74357	4.83	86.93	17.99	9.00	0.00	14	278.45	Fore skin
8708	725877	AA292226	50.62	1877.11	37.08	9.00	0.00	14	278.45	Head and nec Fore skin
9140	346032	W72293	29.45	586.24	19.91	9.00	0.00	14	278.45	Head and nec Fore skin
9478	868332	AA634028	53.84	1075.17	19.97	9.00	0.00	14	278.45	Head and nec Fore skin
11609	840783	AA486082	17.02	261.44	15.38	9.00	0.00	14	278.45	Head and nec Fore skin
12145	855745	AA663981	29.67	3034.57	102.27	9.00	0.00	14	278.45	Head and nec Fore skin
12281	52755	H29783	9.47	219.72	23.20	9.00	0.00	14	278.45	Head and nec Fore skin
14156	1412238	AA844818	7.68	392.52	51.11	9.00	0.00	14	278.45	Head and nec Fore skin
14654	490885	AA120868	19.58	426.06	21.76	9.00	0.00	14	278.45	Head and nec Fore skin
18850	28958	R40867	8.55	82.56	9.65	9.00	0.00	14	278.45	Head and nec Fore skin
18828	854891	AA830100	5.51	64.84	11.37	9.00	0.00	14	278.45	Head and nec Fore skin
21571	138693	R63497	9.18	224.10	24.40	9.00	0.00	14	278.45	Head and nec Fore skin
4412	140515	R66057	30.54	455.14	14.90	8.00	3.00	14	278.45	Head and nec Fore skin
7037	344554	W72972	7.37	132.61	18.02	8.00	3.00	14	278.45	Head and nec Fore skin
11821	51548	H20826	45.73	599.97	13.12	8.00	3.00	14	278.45	Head and nec Fore skin
1952	248261	N78083	2.50	37.43	14.96	8.00	2.00	14	278.45	Head and nec Fore skin

Table 2C

2367	175103	H39187	6.25	67.88	10.86	8.00	2.00	1	343.57	Parathyroid	Aorta	Brain
5616	121738	T98075	18.48	215.95	11.69	8.00	2.00	5	391.73	Pool	LID not found	Other
4996	251019	H87778	25.48	586.14	23.00	8.00	1.00	16	406.29	Small intestine	Esophagus	
8108	486885	AA043092	8.85	135.78	15.35	8.00	1.00	15	245.32	Eye	Uterus	Colon
13815	882522	AA076466	59.77	639.22	10.89	8.00	1.00			Cervix	Liver	Adipose
14440	753376	AA411685	5.97	107.04	17.94	8.00	1.00			Pancreas	Ovary	Tonsil
18769	148914	R82602	10.08	228.44	22.75	8.00	1.00	6	172.31	Nose	Spleen	Placenta
20060	449034	AA777384	3.10	111.29	35.90	8.00	1.00	1	550.58	Stomach	Germ Cell	Colon
239	296444	W01048	6.03	102.30	16.95	8.00	0.00	6	118.59			
1872	80109	T63324	13.00	200.07	15.39	8.00	0.00	14	241.84	Spleen	Pancreas	Ovary
2232	809532	AA456598	2.87	30.26	11.32	8.00	0.00	6	107.37	Ignore	Aorta	Germ Cell
2756	243741	NA9828	4.64	255.66	55.08	8.00	0.00	11	236.72	Smooth muscle	Placenta	Skin
5080	813757	AA453816	5.57	90.47	16.24	8.00	0.00	17	475.65	Eye	Stomach	Breast
5882	295106	W01645	3.52	44.23	12.55	8.00	0.00	11	262.56		Placenta	Kidney
6408	79726	T62552	6.87	131.55	18.71	8.00	0.00	11	232.44	Pool	LID not found	Other
6820	52021	H22568	1.81	31.48	19.58	8.00	0.00	8	440.23	Esophagus	Cervix	Germ Cell
7294	324715	W47362	6.80	107.28	15.77	8.00	0.00	2	471.33	Adrenal gland	Ovary	Brain
8942	201440	R99105	7.19	87.44	12.16	8.00	0.00	1	174.53	Small intestine	Smooth muscle	Stomach
9001	771301	AA443637	4.45	77.86	17.50	8.00	0.00	4	453.51	Neural	Blood	Lymph
10472	742132	AA408020	21.64	246.82	11.40	8.00	0.00	11	22.62	Pancreas	Colon	
10637	755612	AA418229	11.88	188.01	15.69	8.00	0.00			Eye	Pool	Placenta
12851	625853	AA187641	28.78	381.61	13.28	8.00	0.00	14	251	Adrenal gland	Germ Cell	Gall bladder
13348	1493160	AA878880	5.08	348.78	68.25	8.00	0.00	19	278.4	Whole embryo	Brain	LID not found
14773	528587	AA128407	3.24	75.85	23.42	8.00	0.00			Lung	Ovary	LID not found
16087	1475955	AA873685	6.78	135.95	20.05	8.00	0.00	5	633.32	Lung	Pool	Other
17522	840577	AA488070	46.81	2250.74	48.08	8.00	0.00	11	289.86	Pool	Heart	Ovary
17650	29987	R42536	1.87	21.25	11.38	8.00	0.00	11	226.98	Pool	LID not found	Other
20448	220473	H87271	4.01	117.01	29.21	8.00	0.00	13	223.78	Pancreas	Nose	Parathyroid
22034	129032	R10382	20.56	335.32	16.31	8.00	0.00	19	278.24	Brain	Ovary	Prostate
10652	25520	R37696	16.19	195.37	12.07	7.00	5.00	14			Colon	Kidney
6103	771023	AA427878	4.65	39.05	8.39	7.00	4.00	8	90.85	Pool	Spleen	Uterus
11118	26196	R20755	13.33	265.62	19.93	7.00	4.00	22	50.5	CNS	Blood	Lung
6305	364563	AA022949	4.71	184.27	34.90	7.00	3.00	X	287.88	CNS	Pool	Whole embryo
4157	204698	H57273	9.16	287.13	31.34	7.00	2.00	14	278.45	Lymph node	Adipose	Small intestine
13839	811943	AA455012	3.47	78.84	22.73	7.00	2.00	15	145.78	Eye	Pool	Brain
4747	814378	AA458039	46.27	1271.99	21.49	7.00	1.00	21	217.43	Aorta	Forebrain	Pancreas
5552	208413	H62182	2.75	77.76	28.27	7.00	1.00	16	170.16		Lymph	Brain
7827	52226	H23265	3.65	61.73	16.83	7.00	1.00	12	457.41	Pool	Adipose	Forebrain
8902	253009	H88540	311.21	4461.25	14.34	7.00	1.00			LID not found	LID not found	Other
10181	121651	T87710	3.90	71.56	16.34	7.00	1.00			Pancreas	Colon	Kidney
11321	490329	AA127741	3.52	45.33	12.88	7.00	1.00			Pool	Spleen	Uterus
14101	121154	T68835	16.25	192.86	11.87	7.00	1.00			50.5	CNS	Lung
16863	1323448	AA873804	66.53	527.64	7.93	7.00	1.00			287.88	CNS	Whole embryo
18885	823647	AA456984	10.07	169.12	16.80	7.00	1.00			278.45	Lymph node	Small intestine
150	214441	H73590	3.21	285.97	88.16	7.00	0.00			145.78	Eye	Brain
1250	383088	AA019482	4.30	82.85	19.25	7.00	0.00			217.43	Aorta	Pancreas
1698	815542	AA456886	21.58	509.40	23.61	7.00	0.00			170.16		Brain
2335	184038	H30888	1.95	28.40	14.59	7.00	0.00			Adipose	Pool	Forebrain
2451	119814	T64263	51.83	670.76	12.94	7.00	0.00			LID not found	LID not found	Other
2516	234376	N28268	7.27	169.22	23.28	7.00	0.00					
2551	110585	T90201	15.24	158.45	10.27	7.00	0.00					

Table 2C

2641	245299	N53453	28.31	241.70	8.25	7.00	0.00	17	68.81	Pool	LID not found
3071	195034	R88764	17.51	212.01	12.10	7.00	0.00	6	118.59	LID not found Other	
3242	80109	T63324	16.69	279.39	16.74	7.00	0.00	9	25.38	Pool	
3361	295600	N66843	6.53	54.17	8.29	7.00	0.00	5	153.69	Eye	Lymph
4103	201334	R98591	27.18	282.10	9.64	7.00	0.00	20	353.84	Thymus	Spleen
5020	293325	N64882	4.91	73.61	14.99	7.00	0.00	5	287.05	Nose	Blood
5633	814528	AA459588	4.49	58.09	12.93	7.00	0.00	1	192.55	Fore skin	LID not found
6061	11219	N21592	11.29	68.12	7.98	7.00	0.00	8	436.5	Ovary	Cobn
7064	769600	AA425900	2.06	24.85	12.06	7.00	0.00	1	182.55	Breast	Heart
7504	47459	H11453	3.98	111.46	27.63	7.00	0.00	8	278.45	Esophagus	Testis
8915	345081	W74802	2.11	18.88	6.93	7.00	0.00	14	165.58	Blood	Adipose
9025	755851	AA468539	5.07	392.62	77.40	7.00	0.00	11	18.88	Nose	Ovary
9421	811046	AA485427	18.58	145.66	8.78	7.00	0.00	8	561.65	Breast	Eye
9753	428338	AA005153	5.39	48.88	9.07	7.00	0.00	2	745.31	Omentum	Peripheral ner
9784	755599	AA419251	64.15	1420.22	22.14	7.00	0.00	1	15.89	Muscle	Brain
10501	810089	AA464863	17.49	309.86	17.71	7.00	0.00	8	440.43	Blood	LID not found
10642	49987	H28734	2.00	78.04	39.51	7.00	0.00	14	251	Adrenal gland	Germ Cell
11774	80585	T40541	9.60	78.19	8.15	7.00	0.00	21	263.74	Ignore	Stomach
12069	502634	AA127017	35.10	445.08	12.68	7.00	0.00	17	383.22	Epididymis	CNS
12638	785585	AA449444	4.74	110.99	23.41	7.00	0.00	18	361.71	Thymus	Synovial mem
12638	785585	AA449444	4.74	110.99	23.41	7.00	0.00	21	146.87	Placenta	LID not found
13254	593929	AA168378	7.36	74.50	10.12	7.00	0.00	17	429.02	Pool	LID not found
13645	276058	N51682	7.47	216.16	28.95	7.00	0.00	13	85.51	Placenta	LID not found
14858	343174	W67536	7.55	67.51	8.94	7.00	0.00	3	49.43	Pool	Other
16887	1323591	AA650826	19.86	697.63	35.12	7.00	0.00	1	561.29	Thyroid	Breast
20712	746159	AA417622	28.94	449.11	16.67	7.00	0.00	6	137.73	Pool	Lung
20759	435319	AA999931	13.61	184.64	13.57	7.00	0.00	9	367.64	Ovary	Breast
21406	23819	R39446	4.55	39.34	8.64	7.00	0.00	3	227.76	Pool	LID not found
21493	756463	AA436401	6.35	694.94	83.19	7.00	0.00	15	263.15	Pool	Other
21668	452683	AA778846	3.84	49.19	12.82	7.00	0.00	21	263.63	Pool	LID not found
22185	265103	N21336	7.07	130.11	18.40	7.00	0.00	20	117.11	Pool	Other
369	196636	R93007	18.40	376.08	20.44	6.00	5.00	9	137.73	Pool	Lung
596	141106	R68219	30.01	315.07	10.50	6.00	5.00	3	227.76	Pool	LID not found
710	247835	N58163	39.23	549.46	14.01	6.00	5.00	16	439.12	Pool	Other
1057	245413	N77203	27.69	626.95	22.64	6.00	5.00	15	263.15	Pool	Other
1400	242010	H93819	27.74	600.51	21.65	6.00	5.00	21	263.63	Pool	LID not found
1428	137885	R63811	15.71	182.89	11.64	6.00	5.00	20	117.11	Pool	Other
1649	276634	R94840	32.88	512.12	15.67	6.00	5.00	9	137.73	Pool	Lung
1890	246688	N78301	36.63	443.91	12.12	6.00	5.00	3	227.76	Pool	LID not found
2204	240748	H81337	32.24	396.25	12.29	6.00	5.00	16	439.12	Pool	Other
2208	193724	H47663	17.13	279.24	16.30	6.00	5.00	15	263.15	Pool	Other
2592	214205	H77797	40.13	537.54	13.40	6.00	5.00	21	263.63	Pool	LID not found
2950	194985	R81004	24.84	325.60	13.11	6.00	5.00	20	117.11	Pool	Other
3365	204088	H65897	55.60	1040.08	18.71	6.00	5.00	9	137.73	Pool	Lung
3401	245386	N54893	12.82	285.33	20.69	6.00	5.00	3	227.76	Pool	LID not found
3441	206781	R98074	12.65	155.14	12.35	6.00	5.00	15	263.15	Pool	Other
3688	195553	R81821	11.20	188.27	16.81	6.00	5.00	21	263.63	Pool	LID not found
4205	204489	H65574	28.59	289.96	9.80	6.00	5.00	20	117.11	Pool	Other
4428	193250	R68736	28.75	502.50	17.48	6.00	5.00	9	137.73	Pool	Lung
4464	195052	R91176	31.62	652.86	20.65	6.00	5.00	3	227.76	Pool	LID not found
4460	185091	R91244	22.28	407.93	16.31	6.00	5.00	15	263.15	Pool	Other
4496	165139	R91271	29.88	380.59	14.16	6.00	5.00	9	137.73	Pool	Lung

Table 2C

4550	798188	AA461108	4.86	97.97	20.14	5.00	5.00	13	297.84	Brain	LID not found
4558	301678	N79558	45.80	914.31	19.96	6.00	5.00	14	207.23	Lung	Uterus
4590	233008	H79130	22.76	262.82	11.54	6.00	5.00	7	20.09	Pooled	
4608	344141	W68791	35.47	638.95	17.96	6.00	5.00			Testis	LID not found
4861	209837	R98004	22.51	434.35	19.30	6.00	5.00	2	216.99	Pool	LID not found
5208	210622	H64244	9.85	198.27	20.12	6.00	5.00			Pool	LID not found
5272	194820	R92285	48.14	752.28	16.30	6.00	5.00			Pool	LID not found
5721	201317	R99990	13.71	206.53	15.06	6.00	5.00	2	545.1	Forebrain	Whole embryo
5988	195853	R92310	13.98	253.22	18.12	6.00	5.00				
6048	280122	N49231	59.47	1328.43	22.30	6.00	5.00	8	334.17	CNS	LID not found
7340	289867	N82080	17.77	210.46	11.65	6.00	5.00	16	193.03	Lymph	LID not found
7586	34010	A44847	41.18	374.56	9.10	6.00	5.00	2	508.52	Tonsil	Pool
11210	N82947	N82947	61.18	887.19	14.50	6.00	5.00			Pool	LID not found
848	196641	R95525	18.22	259.47	14.24	6.00	4.00			Pool	LID not found
3704	242011	H93319	63.22	645.51	10.21	6.00	4.00	1	249.15	Pool	LID not found
5725	210548	H85052	29.39	174.79	5.95	6.00	4.00	11	167.19	Liver	Blood
5788	810813	AA458884	10.58	303.83	28.72	6.00	4.00			Larynx	Head and neck
10309	48238	H10661	80.09	645.94	8.06	6.00	4.00	3	139.88	CNS	Aorta
2920	207950	R53446	3.63	118.59	32.94	6.00	4.00	5	38.18	Brain	LID not found
5228	202740	H53893	33.68	486.27	14.45	6.00	3.00	12	635.66	Pool	LID not found
11576	33022	AA450503	63.82	748.53	11.70	6.00	3.00	4	464.53	Kidney	Colon
13336	42824	R60170	2.41	261.02	108.17	6.00	3.00	8	670.02	Brain	LID not found
287	294255	N98839	78.47	702.93	6.96	6.00	3.00	9	256.24	Brain	Colon
4107	121808	T97427	12.66	124.80	9.84	6.00	2.00	6	539.64	Kidney	Colon
5747	295916	W04132	51.22	527.18	10.29	6.00	2.00	1	636.07	Pool	LID not found
7139	344430	W73473	7.12	470.67	68.11	6.00	2.00	20	333.71	CNS	Pool
7861	243159	H94371	4.48	52.50	11.73	6.00	2.00	5	344.82	Thyroid	Heart
11881	51631	H10045	3.31	114.04	34.44	6.00	2.00	1	334.46	Kidney	Pool
17821	46827	H22949	27.29	438.85	16.01	6.00	2.00	4	487.98	Brain	LID not found
11111	187616	R83758	2.99	56.67	18.65	6.00	1.00	1	119.15	Heart	Breast
3397	203805	H56424	14.15	98.25	6.94	6.00	1.00	17	272.44	Pool	LID not found
3444	344588	W73140	2.78	102.48	36.91	6.00	1.00			Larynx	Testis
7221	51839	H22856	2.78	45.22	16.25	6.00	1.00			Parathyroid	CNS
7814	810002	AA454864	21.22	191.72	9.04	6.00	1.00	3	111.36	Adipose	Blood
9223	366887	AA028597	3.61	83.72	23.16	6.00	1.00	20	333.71	CNS	Heart
17984	42793	R59722	6.86	64.57	9.41	6.00	1.00	10	286.56	Kidney	Eye
20541	741919	AA402040	4.49	101.01	22.51	6.00	1.00			Ovary	Breast
98	79629	T62491	10.11	126.38	12.50	6.00	0.00	2	473.05	Lymph	Synovial mem
157	727251	AA412053	100.19	1601.71	15.99	6.00	0.00	12	39.87	Esophagus	Parathyroid
263	123065	R98529	25.84	237.06	8.25	6.00	0.00	21	225.9		
321	196837	R82865	38.28	306.84	8.02	6.00	0.00			Pool	LID not found
460	153411	R47878	103.88	1436.31	13.83	6.00	0.00	6	117.99	Lymph node	Small intestine
707	824659	AA491302	5.45	48.59	8.55	6.00	0.00			CNS	Colon
709	240318	H89795	10.25	76.85	7.50	6.00	0.00			Pool	LID not found
1024	136168	R53860	18.37	169.96	9.25	6.00	0.00			Placenta	LID not found
1081	230637	H74490	18.98	175.55	9.28	6.00	0.00	12	473.2	Pool	LID not found
1458	39874	R54560	5.31	115.80	21.81	6.00	0.00	13	268.41	Esophagus	Ovary
1570	78294	T60788	11.05	96.58	6.74	6.00	0.00	5	421.53	Liver	CNS
1793	113488	T79084	13.81	163.65	11.85	6.00	0.00	12	130.31		Colon

Table 2C

1877	202802	H53920	28.85	219.15	7.60	6.00	0.00	13	155.48 Pool	LID not found Other
2247	290893	N72009	12.40	103.45	8.34	8.00	0.00		Fore skin	LID not found Other
2270	210744	H66855	4.23	37.73	8.92	6.00	0.00	2	315.78 Pool	LID not found Other
2424	66560	T87053	15.83	529.35	33.43	6.00	0.00	22	46.87	
2944	194906	R00957	12.00	143.03	11.92	6.00	0.00		Pool	LID not found Other
3015	758332	AA404276	56.84	455.79	8.02	6.00	0.00	3	191.53 Whole embryo	LID not found
3031	271378	N34751	9.16	70.84	7.71	6.00	0.00	1	293.86 Eye	LID not found
3719	130791	R22113	13.46	113.53	8.43	6.00	0.00	7	424.87	Fore skin
3801	213535	H72259	14.24	101.45	7.13	6.00	0.00	18	474.57 Pool	LID not found Other
3981	70827	T46924	3.54	1338.88	378.45	6.00	0.00		'675.52 Placenta	Uterus
4016	203132	H54628	11.87	447.40	37.70	6.00	0.00	7	693.74 Smooth muscle	Kidney
4461	292833	N90491	14.03	188.93	13.47	6.00	0.00	3	81.13 Thymus	Esophagus
4786	754338	AA410207	13.11	356.01	27.15	6.00	0.00	1	Bone	Breast
5051	769921	AA430504	7.99	155.62	19.47	6.00	0.00		Brain	Cervix
5590	201264	R09311	6.65	61.68	11.10	6.00	0.00	20	254.9 Larynx	Head and necColon
5633	122718	T98615	11.93	122.49	10.26	6.00	0.00	1	740.99 Liver	LID not found
5685	207968	H60491	15.17	132.58	8.74	6.00	0.00	2	544.88 Pool	Placenta
5828	51447	H20872	7.47	119.62	16.02	6.00	0.00	1	576.3 Peripheral ner	Kidney
5839	809598	AA458472	38.48	297.75	8.18	6.00	0.00	6	118.71 Thymus	Blood
5857	897908	AA598652	8.78	73.88	8.43	6.00	0.00	1	118.71 Thymus	Adipose
5964	191516	H38148	7.53	94.44	12.55	6.00	0.00	6	701.95 Kidney	Thyroid
5984	195125	R92347	24.08	233.28	9.69	6.00	0.00	3	Brain	LID not found
6127	185370	R89581	6.38	43.67	6.84	6.00	0.00		Eye	Parathyroid
6648	854444	AA680555	20.16	191.50	9.50	6.00	0.00	6	118.71 Thymus	Heart
6771	194172	R52030	8.68	147.38	16.97	6.00	0.00	19	234.91 Colon	LID not found
6948	271076	N29918	9.42	102.30	10.86	6.00	0.00	6	401.87 Fore skin	Adipose
7456	344589	W73144	14.83	512.53	34.56	6.00	0.00	13	136.15 Lymph	Placenta
8097	429695	AA011598	16.54	142.66	8.63	6.00	0.00		Pool	Blood
8176	884644	AA828897	4.87	168.85	36.21	6.00	0.00	18	83.51 Synovial mem	LID not found Other
8197	501479	AA115328	1.91	21.54	11.30	6.00	0.00		Uterus	Umbilical cord
8233	417761	W88725	18.40	325.08	17.58	6.00	0.00	15	Prostate	Lymph node
8248	869375	AA679907	9.58	94.38	9.85	6.00	0.00		Uterus	LID not found
8374	487327	AA045524	9.70	288.81	29.78	6.00	0.00		Ovary	Pool
8564	810457	AA457137	5.39	58.93	10.94	6.00	0.00	10	336.4 Head and nec	Parathyroid
8599	454672	AA677185	22.04	160.52	7.28	6.00	0.00	15	258.04 Synovial mem	Eye
10646	739193	AA421218	5.15	100.31	19.49	6.00	0.00	21	229.15 Ovary	Placenta
10746	595197	AA194847	5.22	82.18	15.76	6.00	0.00	10	522.77 Fore skin	Bone
11263	488594	AA044814	11.82	88.78	7.51	6.00	0.00	22	88.54 Heart	Brain
11962	365642	AA025930	5.43	56.03	10.33	6.00	0.00	8	680.88 Ovary	Blood
12046	124447	R011094	17.48	123.68	7.07	6.00	0.00	2	564.08 Larynx	Pool
12058	854608	AA630094	35.84	391.86	10.64	6.00	0.00	8	78.13 Adipose	Colon
12668	1482426	AA878576	17.62	168.98	9.48	6.00	0.00	19	240.37 Ovary	Esophagus
14016	233759	H64591	6.60	96.24	17.18	6.00	0.00	15	Eye	Thymus
14040	29920	R42312	2.97	38.06	12.83	6.00	0.00		Cervix	Pancreas
14735	843058	AA488604	4.62	61.72	13.38	6.00	0.00		Uterus	Brain
14842	339178	W60473	7.04	70.55	10.03	6.00	0.00		Pooled	Testis
15508	512116	AA133590	17.48	389.56	22.29	6.00	0.00	X	245.06 Aorta	Germ Cell
15726	786308	AA461863	9.52	117.89	12.38	6.00	0.00	12	42.88 Esophagus	Fore skin
15927	511952	AA100674	465.83	9928.18	21.31	6.00	0.00		Colon	Spleen
15940	666029	AA193378	13.98	189.87	13.98	6.00	0.00	X	244.38 Blood	Brain
16285	731198	AA417355	3.55	49.29	13.87	6.00	0.00	1	75.41 Parathyroid	CNS
										Lung
										Uterus

Table 2C

11126	609743	AA169372	8.77	143.60	14.70	5.00	1.00	Eye	LID not found Other
12018	238056	H53703	8.28	259.74	31.33	5.00	1.00	307.6 Pooled	Placenta Germ Cell
12103	61044	T40725	41.16	403.09	9.78	5.00	1.00	Spleen	Lymph Pool
12855	35481	R45592	5.81	830.35	142.87	5.00	1.00	Brain	Eye Breast
14439	812074	AA455988	4.75	98.82	20.82	5.00	1.00	Brain	Liver Kidney
14590	35300	R43788	24.85	256.12	10.30	5.00	1.00	Eye	Parathyroid Brain
15678	1473690	AA916728	7.54	77.58	10.29	5.00	1.00	Ignote	Codon Blood
17546	131979	R32440	240.42	4981.58	20.72	5.00	1.00	136.63 Parathyroid	Placenta Nose
19086	278644	N66205	3.06	64.54	21.06	5.00	1.00	417.03 CNS	Brain Lung
21482	277173	N54316	6.07	363.64	59.90	5.00	1.00	304.45 Aorta	Prostate CNS
21494	280602	N47388	7.82	97.12	12.42	5.00	1.00	CNS	Eye Breast
21812	381038	AA054643	12.52	171.44	13.70	5.00	1.00	Eye	LID not found Other
28	139817	R62862	3.40	104.38	30.71	5.00	0.00	119.16 Heart	Placenta Breast
36	245330	N54596	17.81	1247.32	70.02	5.00	0.00	16.42	Placenta Breast
105	366834	AA029418	1.91	18.11	9.49	5.00	0.00	Pancreas	Ovary Breast
118	245330	N54596	16.00	2255.66	140.96	5.00	0.00	16.42	Lung Breast
125	183337	H42679	13.99	179.31	12.82	5.00	0.00	118.59 Lymph	Whole embryo Placenta
254	132568	R26798	72.02	500.59	6.95	5.00	0.00	253.8 Pooled	Smooth muscle Testis Colon
282	795856	AA461521	3.12	41.15	13.17	5.00	0.00	85.25 Pool	LID not found Other
350	298168	N74365	17.45	132.42	7.59	5.00	0.00	576.49 Pooled	CNS Foreskin
527	342593	W68537	4.62	76.81	16.61	5.00	0.00	-	Pool LID not found
684	194587	R84375	56.83	430.86	7.58	5.00	0.00	Thyroid	Spleen Aorta
704	810843	AA458859	5.57	39.10	7.02	5.00	0.00	Aorta	CNS Brain
764	354555	AA022601	3.67	39.80	10.84	5.00	0.00	191.81 Adipose	Skin Stomach
856	754479	AA410567	10.24	488.78	47.75	5.00	0.00	40.26 Umbilical cord	Uterus Placenta
1009	68864	T64994	69.99	480.78	7.01	5.00	0.00	41.44 Lymph	Heart Breast
1048	138189	R53910	24.19	199.56	8.25	5.00	0.00	450.15	LID not found Other
1130	246144	N55492	24.28	186.77	7.69	5.00	0.00	225.9 Pool	LID not found Other
1137	188026	R94601	18.08	128.78	7.18	5.00	0.00	Cervix	Synovial mem Marrow
1404	137787	R68245	72.54	605.28	8.34	5.00	0.00	471.03 Ovary	Stomach Ear
1422	110987	T90369	111.54	867.64	12.37	5.00	0.00	Pool	LID not found Other
1646	897982	AA596863	34.56	427.57	8.56	5.00	0.00	542.11 Spleen	Pool LID not found
1686	782513	AA432030	48.89	416.62	18.79	5.00	0.00	Pool	LID not found Other
1783	120162	T95274	8.20	172.76	7.30	5.00	0.00	Brain	LID not found Other
1789	213327	H70143	18.06	131.75	10.06	5.00	0.00	Testis	Pool LID not found
1785	292207	N80622	75.72	761.78	8.69	5.00	0.00	Pool	LID not found Other
1789	120124	T95160	12.85	112.46	8.57	5.00	0.00	84.53 Pool	LID not found Other
1785	120823	T96462	3.18	23.26	7.32	5.00	0.00	Pool	LID not found Other
1809	208769	H61037	18.90	161.93	6.53	5.00	0.00	250.6 Breast	LID not found Other
1889	199229	R95619	7.40	48.35	8.79	5.00	0.00	102.82 Pool	LID not found Other
1905	199220	R95651	17.87	160.56	8.99	5.00	0.00	86.57 CNS	Breast Pool
1918	155201	R70361	89.10	682.72	7.66	5.00	0.00	726.84 Pool	LID not found Other
2136	193533	H47542	33.47	284.33	8.29	5.00	0.00	357.75 Pool	LID not found Other
2152	233289	H78855	32.09	285.95	9.22	5.00	0.00	636.05 Gall bladder	Liver Spleen
2181	276286	R94591	84.38	700.57	8.30	5.00	0.00	Pool	LID not found Other
2213	242084	H93042	25.24	176.76	7.00	5.00	0.00	701.75 Pooled	Pancreas Brain
2262	241178	H91121	41.59	393.46	110.61	5.00	0.00	250.6	Esophagus Skin
2302	235173	H73013	35.34	293.21	7.52	5.00	0.00	19	Gall bladder
2478	36583	R51912	1.23	135.62	19.77	5.00	0.00		
2499	120681	T96657	40.85	307.34		5.00	0.00		
2505	141854	R70598	54.14	1070.61		5.00	0.00		

Table 2C

2514	31251	R42852	3.49	80.80	23.15	5.00	0.00	X	86.82	Ear	Bone	Fore skin
2545	243260	H95823	94.16	824.13	8.75	5.00	0.00	1	-1.31	Small Intestine	Tonsil	Pool
2563	120863	T96077	5.29	61.32	11.60	5.00	0.00	1		LID not found	Other	
2590	204735	H57242	36.75	344.96	9.39	5.00	0.00	10	310.17	Liver	Pool	LID not found
2611	243414	N48139	20.60	142.27	6.91	5.00	0.00	1	81.13	Thymus	Colon	Breast
2684	244044	N38801	18.16	256.25	15.88	5.00	0.00	1	618.8	Umbilical cord	Gall bladder	Thymus
2836	814054	AA465478	5.26	43.37	8.25	5.00	0.00	1		Breast	Whole embryo	Tonsil
2896	196270	R72661	26.97	157.44	5.94	5.00	0.00	1	85.48	Pool	LID not found	Other
2894	241539	H90603	69.25	587.51	8.43	5.00	0.00	8	463.92	Stomach	Pool	LID not found
2871	127409	R08761	22.48	216.48	9.63	5.00	0.00	17	322.97	Pool	LID not found	Other
3023	214963	H71224	23.34	228.49	9.83	5.00	0.00	6	118.38	Nose	Thymus	Smooth muscle
3170	840942	AA486627	30.39	438.19	14.42	5.00	0.00	12	246.56			
3272	207098	H48502	307.87	2229.97	7.24	5.00	0.00	1	92.78	Ovary	Breast	Tonsil
3316	307255	W21482	9.09	65.35	7.10	5.00	0.00	10	354.68	Whole embryo	LID not found	Kidney
3684	195359	R89539	23.61	239.05	10.13	5.00	0.00	1		Pool	Pool	Kidney
3712	195381	R88959	28.51	287.98	6.78	5.00	0.00	1		Pool	LID not found	Other
3710	111200	T44381	22.65	165.90	7.33	5.00	0.00	1		Pool	LID not found	Other
3712	195784	R89285	25.92	255.51	9.86	5.00	0.00	1		Pool	LID not found	Other
3774	248638	N78306	15.47	125.08	8.09	5.00	0.00	5	283.38	Stomach	Umbilical cord	Spleen
3808	293835	N95107	18.39	138.39	7.53	5.00	0.00	1	588.76	Stomach	Blood	Placenta
3819	198258	R94456	25.79	196.78	7.63	5.00	0.00	1		Breast	Eye	Pool
4032	235155	H79353	7.53	62.04	8.24	5.00	0.00	1		Aorta	Tonsil	Lung
4049	247901	N77671	125.22	944.82	7.55	5.00	0.00	3	884.2	Ear	Cervix	Eye
4189	234647	H77738	9.38	59.93	6.39	5.00	0.00	1	695.13	Pool	LID not found	Other
4489	298793	W01171	41.02	270.05	6.58	5.00	0.00	13	269.41	Esophagus	Ovary	CNS
4492	248308	N78103	19.14	157.51	8.23	5.00	0.00	7	500.33	Lymph	Pool	LID not found
4561	293990	N95656	73.34	563.30	7.68	5.00	0.00	13	475.57	Kidney	Pancreas	Testis
4700	810751	AA480851	7.32	183.05	22.26	5.00	0.00	13	141.14	Parathyroid	Fore skin	Heart
4882	66474	R16009	9.06	87.27	9.63	5.00	0.00	4	450.11	Uterus	Placenta	Parathyroid
4894	813256	AA455911	3.27	79.35	24.25	5.00	0.00	17	338.92	Pool	LID not found	Other
5111	80500	T64625	273.12	3216.30	11.78	5.00	0.00	11	237.93	Trachea	Parathyroid	Thyroid
5213	134948	R31631	7.01	54.85	7.82	5.00	0.00	16	471.03	Ovary	Stomach	Ear
5287	129567	R14894	30.48	283.76	8.32	5.00	0.00	15	243.89	Placenta	Pool	Tonsil
5384	150702	H02340	1.26	36.62	29.13	5.00	0.00	1	27			
5466	160623	H02188	15.68	137.58	8.78	5.00	0.00	2	354.55	Thymus	Tonsil	Colon
5538	782513	AA448478	69.15	815.43	11.79	5.00	0.00	10	400.44	Spleen	Thyroid	Whole embryo
5942	811600	AA458533	3.45	71.40	20.87	5.00	0.00	1	93.22	Peripheral ner	Bone	Tonsil
5983	134235	R31154	66.98	542.63	8.10	5.00	0.00	10	237.93	Trachea	Parathyroid	Thyroid
6023	136317	R34121	38.44	325.85	8.94	5.00	0.00	1	-3.15		Thymus	Fore skin
6034	120097	T95151	4.17	53.46	12.82	5.00	0.00	12	69.28	Aorta	Cervix	Pancreas
6079	181988	H25846	60.64	644.48	10.63	5.00	0.00	16	48.86	Pool	Blood	Adrenal gland
6131	212438	H68528	58.01	551.59	9.51	5.00	0.00	12	228.02	Larynx	Skin	Esophagus
6240	301043	N81017	2.99	24.89	8.31	5.00	0.00	12	227.72	Colon	Omentum	Lymph node
6369	744800	AA644448	7.62	75.32	9.89	5.00	0.00	1				
6490	743230	AA400234	77.96	616.12	7.90	5.00	0.00	1				
6819	810801	AA458878	9.55	245.62	25.73	5.00	0.00	1				
6963	133664	R28690	4.18	66.73	15.92	5.00	0.00	1				
7087	345034	W72294	7.48	552.19	73.72	5.00	0.00	1				
7334	742115	AA405800	22.28	175.18	7.87	5.00	0.00	1				
8058	592111	AA150532	5.84	76.09	13.03	5.00	0.00	1				
8216	855521	AA684179	113.25	1550.11	13.69	5.00	0.00	1				

Table 2C

8684	68818	T53431	11.34	153.67	13.55	5.00	0.00	Pancreas	Adrenal gland	Placenta
9733	359009	W92134	1.85	21.18	11.44	5.00	0.00	581.51 Head and nec	Esophagus	Skin
9788	155768	R72087	1.86	32.84	17.33	5.00	0.00	227.81 Esophagus	Stomach	Breast
9988	795446	AA453616	1.45	28.38	19.61	5.00	0.00	39.72 Germ Cell	Testis	Eye
10084	345743	W72666	20.15	178.23	8.85	5.00	0.00	154.34 Neural	Brain	Eye
10848	345838	R72692	142.07	1010.78	7.11	5.00	0.00	Heart	Pool	LID not found
10855	134942	R32334	7.00	49.81	7.12	5.00	0.00	253.29 CNS	Stomach	Parathyroid
10803	770681	AA476285	5.30	38.13	7.38	5.00	0.00	42.88 Esophagus	Spleen	Parathyroid
10950	894283	AA669750	32.83	458.69	13.97	5.00	0.00	Skin	Bone	Ear
11127	595078	AA184819	50.61	820.58	16.21	5.00	0.00	101.74 Synovial mem	Fore skin	CNS
11254	795185	AA453474	18.18	290.55	15.98	5.00	0.00	632.4 Adrenal gland	Pooled	Parathyroid
11256	755751	AA496630	4.20	70.39	16.76	5.00	0.00	236.08 Lung	Blood	Parathyroid
12011	185635	R89317	11.25	119.15	10.59	5.00	0.00	Placenta	Pool	LID not found
12084	144825	R76321	538.48	8998.87	16.78	5.00	0.00	271.02		
12244	23774	R38196	6.61	55.60	8.41	5.00	0.00	630.22		
12322	510273	AA053165	167.30	2378.38	14.22	5.00	0.00	249.52 Trachea	Parathyroid	Thyroid
12527	811927	AA454658	40.04	427.64	10.52	5.00	0.00	377.31 Pool	LID not found	Other
12808	186187	R91848	5.04	34.26	6.80	5.00	0.00	288.35 Testis	Pool	LID not found
13280	31868	R43017	2.40	20.01	8.33	5.00	0.00	73.17 Brain	Lung	Pool
13335	726703	AA396264	6.89	53.89	7.71	5.00	0.00	Parathyroid	Brain	CNS
13880	327480	W20462	2.66	63.69	23.95	5.00	0.00	Pooled	Kidney	Heart
14431	811907	AA454654	5.76	71.10	12.34	5.00	0.00	Larynx	Skin	Umbilical cord
14502	34745	R44409	3.15	140.66	44.61	5.00	0.00	62.24 Brain	LID not found	Other
14820	843251	AA488648	104.73	726.20	8.93	5.00	0.00	184.51		
15402	827401	AA180825	6.03	115.96	19.22	5.00	0.00	481.83 Lymph node	Head and nec	CNS
16812	510576	AA055766	5.41	237.50	47.64	5.00	0.00	Colon	Prostate	Heart
16844	415712	W84658	30.98	354.57	11.44	5.00	0.00	Pool	Heart	LID not found
17397	268115	N30131	1.46	15.03	10.31	5.00	0.00	Pooled	Fore skin	Tonsil
17410	784200	AA448859	57.13	417.54	7.31	5.00	0.00	Whole embryo	Uterus	Pool
17787	731047	AA421282	5.65	181.78	32.18	5.00	0.00	Breast	Testis	Ovary
17804	27769	R40178	3.70	282.41	76.39	5.00	0.00	511.92 Breast	Kidney	Placenta
18189	290213	N64379	2.98	51.53	17.31	5.00	0.00	CNS	Brain	Heart
18364	755782	AA498452	37.94	470.21	12.39	5.00	0.00	320.39 Lymph node	Ovary	Esophagus
18526	713283	AA283020	5.54	247.35	44.67	5.00	0.00	107.5 Pooled	Tonsil	Spleen
18902	825325	AA504478	12.81	113.58	8.87	5.00	0.00	133.86 ignore	Blood	Adipose
19943	294578	N71049	4.01	182.50	45.50	5.00	0.00	249.31		
20501	740780	AA477283	21.46	194.11	8.04	5.00	0.00	Ovary	Testis	Heart
21090	127063	R07891	4.78	53.16	11.13	5.00	0.00	Aorta	CNS	Brain
21596	381021	AA057425	10.98	161.62	14.73	5.00	0.00	Umbilical cord	Ear	Pooled
21715	433294	AA689707	6.14	54.25	8.83	5.00	0.00	-1.01 Pooled	Uterus	Lung
21887	897278	AA677650	9.72	103.35	10.63	5.00	0.00			

Table 2D

Gen Bank	IMAGE_CL	Accession	Secreted?	Secretion	Ave-Normal	Max-fold-up	Max-Exp	Count-up	Count-up cell	Chromosome	Location	Tissue Prominence
p	ONE_ID	Number		predicted?				tumors	lines			
475	753882	AA406601	Yes	Yes	51.39	6.27	322.04	7.00	2.00	10	510.68 Nose	Pooled Stomach
1335	786075	AA431904	Yes	Yes	17.36	280.58	729.74	21.00	1.00	20	255.21 Epididymis	Ovary Thyroid
3444	344588	W73140	Yes	Yes	2.78	36.91	14.70	13.00	1.00	5	155.62 Larynx	Testis
3903	530814	AA070226	Yes	Yes	187.57	6.62	142.77	1.00	0.00	5	155.62 Small Intestine	Liver
5151	774409	AA446108	Yes	Yes	189.78	4.44	184.27	4.00	0.00	9	385.62	
10549	810660	AA459401	Yes	Yes	8.17	68.60	89.93	19.00	1.00	19	274.87 Larynx	Pancreas
13278	279388	M48598	Yes	Yes	16.16	21.55	128.81	20.00	2.00			
13915	862522	AA076468	Yes	Yes	59.77	10.89	211.29	14.00	2.00		Cervix	Adipose
14532	378461	AA755818	Yes	Yes	21.01	90.45	468.89	22.00	2.00		Pooled	Pancreas
18071	1475859	AA872020	Yes	Yes	6.71	29.75	45.12	22.00	1.00			Stomach

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
R62862	DBEst	834741
R73003	DBEst	847035
N54596	DBEst	1195916
AA195636	DBEst	1783715
R52852	DBEst	814754
N95249	DBEst	1267539
AA434102	DBEst	2139016
T69346	DBEst	680494
R01281	DBEst	751017
R98436	DBEst	985148
H65066	DBEst	1023806
AA400739	DBEst	2054627
W05628	DBEst	1278497
R02373	DBEst	752109
T62491	DBEst	666148
AA029418	DBEst	1496961
AA449459	DBEst	2162850
N54596	DBEst	1195916
R83836	DBEst	928713
T67005	DBEst	676445
H42679	DBEst	918731
AA464856	DBEst	2189740
AA481758	DBEst	2211310
H73590	DBEst	1046649
AA412053	DBEst	2070642
AA129552	DBEst	1689317
AA453823	DBEst	2167492
T70503	DBEst	681651
AA449118	DBEst	2163138
H81220	DBEst	1059309
R05416	DBEst	756036
AA455448	DBEst	2178224
AA019591	DBEst	1482883
W20275	DBEst	1296209
T66828	DBEst	676268
N76276	DBEst	1238854
T98244	DBEst	747981
T98320	DBEst	748057
H91281	DBEst	1081711
H60586	DBEst	1013418
R91137	DBEst	958677
H90997	DBEst	1081427
R08220	DBEst	760143
R27329	DBEst	783464
W92594	DBEst	1424978
R38459	DBEst	795915
T66907	DBEst	676347
R63623	DBEst	835502
W01048	DBEst	1273038
T97119	DBEst	735743
R28397	DBEst	784532
R78513	DBEst	854794
T98484	DBEst	748221
R39745	DBEst	797201
H43317	DBEst	919369
R26798	DBEst	782933

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
T98511	DBEst	748248
R37884	DBEst	795340
R06362	DBEst	756982
R10185	DBEst	762141
T98529	DBEst	748266
T67652	DBEst	678800
T67022	DBEst	676462
R25464	DBEst	781599
R08153	DBEst	760076
W86653	DBEst	1400529
T98458	DBEst	748195
N76944	DBEst	1239522
N99839	DBEst	1271382
R97154	DBEst	982814
N72510	DBEst	1229614
AA461521	DBEst	2185385
AA010158	DBEst	1471205
W01484	DBEst	1273483
N74055	DBEst	1231340
T89996	DBEst	718509
N63753	DBEst	1211582
H48360	DBEst	986747
R70462	DBEst	843979
W87752	DBEst	1401837
N74360	DBEst	1231645
R92865	DBEst	965219
N54036	DBEst	1195202
T81574	DBEst	704581
W02624	DBEst	1274602
H04382	DBEst	867315
R92962	DBEst	965316
H79566	DBEst	1057655
N74365	DBEst	1231650
T84084	DBEst	712372
H54622	DBEst	995148
N75735	DBEst	1238313
R06642	DBEst	757262
R93007	DBEst	965361
T90991	DBEst	722904
H50747	DBEst	990588
R97031	DBEst	982691
T80978	DBEst	703863
H98812	DBEst	1123480
AA434487	DBEst	2139401
H67988	DBEst	1026728
H80129	DBEst	1058218
H17882	DBEst	884122
H73080	DBEst	1046466
R01428	DBEst	751164
AA410265	DBEst	2069433
AA489743	DBEst	2219345
AA053051	DBEst	1544190
AA411244	DBEst	2068785
R47979	DBEst	810005
R77251	DBEst	851883
AA406601	DBEst	2064611

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA485626	DBEst	2214845
AA284329	DBEst	1928805
H21071	DBEst	889766
R95132	DBEst	973862
AA491227	DBEst	2220400
R76229	DBEst	850911
W68537	DBEst	1377476
T66833	DBEst	676273
W94714	DBEst	1423854
R43544	DBEst	821473
AA457178	DBEst	2179898
AA598582	DBEst	2432165
AA188155	DBEst	1774347
AA459247	DBEst	2184154
N76471	DBEst	1239049
H81010	DBEst	1059099
R89904	DBEst	954731
R06370	DBEst	756990
R83160	DBEst	928037
R62242	DBEst	834121
R66219	DBEst	838857
N79167	DBEst	1241868
N49883	DBEst	1191049
R54664	DBEst	819122
T81972	DBEst	704979
R06568	DBEst	757188
N73551	DBEst	1230836
R06666	DBEst	757286
T97215	DBEst	735839
R93087	DBEst	965441
H93603	DBEst	1099931
T83558	DBEst	711846
R96525	DBEst	982185
W49715	DBEst	1337980
R66585	DBEst	839223
W32884	DBEst	1314939
R84242	DBEst	942685
R66652	DBEst	839290
T82819	DBEst	711107
R84375	DBEst	942781
R31591	DBEst	787434
R06745	DBEst	757365
N91307	DBEst	1444634
H82330	DBEst	1060419
AA453498	DBEst	2167167
H62267	DBEst	1015099
R36212	DBEst	793113
N80950	DBEst	1243651
H66943	DBEst	1025683
AA464967	DBEst	2189851
R09873	DBEst	761829
AA464970	DBEst	2189854
AA458969	DBEst	2183876
R65573	DBEst	838211
AA620346	DBEst	2524285
AA458959	DBEst	2183866

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
N90470	DBEst	1443797
AA491302	DBEst	2220475
H89795	DBEst	1080225
N58163	DBEst	1202053
W47350	DBEst	1332058
AA037410	DBEst	1512509
AA425655	DBEst	2106467
N66001	DBEst	1218126
AA284292	DBEst	1928574
AA464962	DBEst	2189846
H90946	DBEst	1081376
AA459853	DBEst	2184760
AA022601	DBEst	1486700
H90355	DBEst	1080785
H25546	DBEst	894669
H51461	DBEst	991302
N68565	DBEst	1224726
R10896	DBEst	763631
AA102670	DBEst	1648004
AA479981	DBEst	2208132
H63934	DBEst	1018735
R32952	DBEst	788795
AA454743	DBEst	2177519
T64905	DBEst	673950
AA410567	DBEst	2069673
R76263	DBEst	850945
N90246	DBEst	1443573
T47229	DBEst	649211
N39161	DBEst	1162368
AA458801	DBEst	2183708
AA428170	DBEst	2112210
T67058	DBEst	676498
H18436	DBEst	884676
AA410517	DBEst	2069623
AA434115	DBEst	2139029
AA487634	DBEst	2217798
R93124	DBEst	967290
T72422	DBEst	686943
AA447774	DBEst	2161444
R52654	DBEst	814556
AA448015	DBEst	2161685
T68351	DBEst	679499
T84382	DBEst	712670
T67093	DBEst	676533
R25641	DBEst	781776
N52980	DBEst	1194146
AA281189	DBEst	1923870
T66930	DBEst	676370
N91198	DBEst	1444525
R91710	DBEst	959250
T99145	DBEst	748882
R26813	DBEst	782948
N99799	DBEst	1271313
T99150	DBEst	748887
R92352	DBEst	959892
T98972	DBEst	748709

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
H77533	DBEst	1055622
R99288	DBEst	985889
T99011	DBEst	748748
R53024	DBEst	814926
T99617	DBEst	749354
R26931	DBEst	783066
N75729	DBEst	1238307
H69048	DBEst	1030298
R53860	DBEst	815762
T90360	DBEst	718873
N92085	DBEst	1264394
R26855	DBEst	782990
H16746	DBEst	882986
R53900	DBEst	815802
R07998	DBEst	759921
R08297	DBEst	760220
R53910	DBEst	815812
R06936	DBEst	758859
R01277	DBEst	751013
W24055	DBEst	1300890
N77203	DBEst	1239781
H96213	DBEst	1109355
W02639	DBEst	1274637
T65770	DBEst	674815
R93153	DBEst	967319
R02036	DBEst	751772
N72852	DBEst	1229956
H94978	DBEst	1102611
W03050	DBEst	1275178
R93412	DBEst	967578
N77223	DBEst	1239801
R16769	DBEst	770379
W03052	DBEst	1275180
H75490	DBEst	1050127
N74942	DBEst	1237488
N76803	DBEst	1239381
N62328	DBEst	1210157
R83758	DBEst	928635
R94893	DBEst	973623
R39705	DBEst	797161
AA460003	DBEst	2184887
N91330	DBEst	1444657
W04369	DBEst	1276345
R92609	DBEst	960149
R94212	DBEst	969607
N55492	DBEst	1198371
R94601	DBEst	969996
H51056	DBEst	990897
AA431988	DBEst	2115696
W03672	DBEst	1275517
H53156	DBEst	993303
H75531	DBEst	1049581
H95141	DBEst	1102774
AA424575	DBEst	2103545
N70349	DBEst	1226929
R48796	DBEst	810822

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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R21614	DBEst	776395
R52789	DBEst	814691
H69620	DBEst	1039826
N52474	DBEst	1193640
AA236617	DBEst	1860637
H79047	DBEst	1057136
AA456321	DBEst	2179531
N52293	DBEst	1193459
W02265	DBEst	1274475
N31467	DBEst	1151866
W24429	DBEst	1301379
AA477514	DBEst	2206148
N48137	DBEst	1189303
AA486138	DBEst	2216354
AA019482	DBEst	1482111
AA487797	DBEst	2215228
W03677	DBEst	1275522
AA292676	DBEst	1940670
AA504351	DBEst	2240511
AA456878	DBEst	2179598
AA504710	DBEst	2240870
R11236	DBEst	763971
AA443351	DBEst	2156026
R95780	DBEst	981440
AA598884	DBEst	2432556
H61979	DBEst	1014811
AA453015	DBEst	2166684
AA284668	DBEst	1927579
AA131406	DBEst	1692893
AA455062	DBEst	2177838
H99544	DBEst	1124212
AA448261	DBEst	2161931
AA451904	DBEst	2165573
W02558	DBEst	1274556
N51018	DBEst	1192184
H50229	DBEst	990070
R10159	DBEst	762115
R84407	DBEst	942813
R66924	DBEst	839562
H74032	DBEst	1047168
R07684	DBEst	759607
R16479	DBEst	770089
H53038	DBEst	993185
R06862	DBEst	757482
R67991	DBEst	841508
R16484	DBEst	770094
R98877	DBEst	985478
R98738	DBEst	985339
R01451	DBEst	751187
W31784	DBEst	1312988
R68514	DBEst	842031
H93819	DBEst	1101115
N71457	DBEst	1228169
R84636	DBEst	943042
R68245	DBEst	841762

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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R89157	DBEst	953984
T81988	DBEst	704995
R07313	DBEst	759236
T90369	DBEst	718882
H47297	DBEst	923349
R68381	DBEst	841898
H56655	DBEst	1005299
H47335	DBEst	923387
R02526	DBEst	752262
H65481	DBEst	1024221
R16600	DBEst	770210
H90477	DBEst	1080907
H64938	DBEst	1023678
W15263	DBEst	1289653
H90490	DBEst	1080920
N91317	DBEst	1444644
R54560	DBEst	816462
H64972	DBEst	1023712
R01566	DBEst	751302
AA434382	DBEst	2139296
H65044	DBEst	1023784
T80942	DBEst	703827
AA026030	DBEst	1491449
N30639	DBEst	1149159
H91353	DBEst	1081783
AA463972	DBEst	2188856
H91216	DBEst	1081646
R95827	DBEst	981487
AA458483	DBEst	2183390
H65839	DBEst	1024579
AA156251	DBEst	1727869
N48708	DBEst	1189874
N69574	DBEst	1225735
R76499	DBEst	851148
AA485373	DBEst	2214592
N54803	DBEst	1196123
N77096	DBEst	1239674
AA284285	DBEst	1928567
N57964	DBEst	1201854
H59620	DBEst	1012452
W15277	DBEst	1289667
T99639	DBEst	749376
AA063631	DBEst	1557598
R25521	DBEst	781656
T50788	DBEst	652648
N69672	DBEst	1225833
T98559	DBEst	748296
R44864	DBEst	824237
H84113	DBEst	1062784
R02346	DBEst	752082
AA433851	DBEst	2138765
AA477893	DBEst	2206527
AA421687	DBEst	2100504
AA598863	DBEst	2432535
AA599177	DBEst	2432802

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA487700	DBEst	2217864
T63324	DBEst	667189
AA458965	DBEst	2183872
AA459266	DBEst	2184173
AA143436	DBEst	1712806
W95346	DBEst	1425411
AA504943	DBEst	2241103
AA432030	DBEst	2115738
AA456886	DBEst	2179606
AA113331	DBEst	1665377
AA460480	DBEst	2185226
AA424833	DBEst	2106956
AA489555	DBEst	2219157
AA491225	DBEst	2220398
AA598794	DBEst	2432466
H94949	DBEst	1102582
N43930	DBEst	1182458
H52098	DBEst	991939
N59717	DBEst	1203607
H93217	DBEst	1099545
T95234	DBEst	733858
R02166	DBEst	751902
T95238	DBEst	733862
H89637	DBEst	1080067
W03972	DBEst	1275837
R98295	DBEst	983955
R99685	DBEst	986286
T95274	DBEst	733898
R55406	DBEst	824701
R28287	DBEst	784422
N76675	DBEst	1239253
W04411	DBEst	1276319
N80622	DBEst	1243323
T70429	DBEst	681577
T95160	DBEst	733784
T99894	DBEst	749631
H90990	DBEst	1081420
T79084	DBEst	697593
T95462	DBEst	734086
R02710	DBEst	752446
R92641	DBEst	960181
R15715	DBEst	767963
H61608	DBEst	1014440
H61037	DBEst	1013869
T95693	DBEst	734317
H53732	DBEst	993879
H25019	DBEst	893918
R15709	DBEst	767957
R94808	DBEst	973538
N55067	DBEst	1197946
H66883	DBEst	1025623
N77643	DBEst	1240344
H53224	DBEst	993371
T85990	DBEst	714342

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
N52911	DBEst	1194077
R94810	DBEst	973540
N77652	DBEst	1240353
R91033	DBEst	958573
H53262	DBEst	993409
R00220	DBEst	749956
R94840	DBEst	973570
AA621150	DBEst	2525089
H22171	DBEst	890866
H53878	DBEst	994025
R00688	DBEst	750424
H53553	DBEst	993700
N59494	DBEst	1203384
H59938	DBEst	1012770
H53920	DBEst	994067
R09890	DBEst	761846
H73321	DBEst	1047486
R95819	DBEst	981479
N78301	DBEst	1241002
R76782	DBEst	851414
N36882	DBEst	1158024
R95851	DBEst	981511
H78482	DBEst	1056571
W88967	DBEst	1404003
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H79363	DBEst	1057452
H53964	DBEst	994111
R70361	DBEst	843878
AA284180	DBEst	1928525
AA457158	DBEst	2179878
AA478279	DBEst	2206913
AA458653	DBEst	2183560
N78083	DBEst	1240784
H78484	DBEst	1056573
AA001444	DBEst	1436975
AA464525	DBEst	2189409
H65034	DBEst	1023774
R28423	DBEst	784558
R11490	DBEst	764225
H66158	DBEst	1024898
W96268	DBEst	1426175
R06634	DBEst	757254
AA058857	DBEst	1551664
AA233079	DBEst	1856267
AA031284	DBEst	1501239
R31395	DBEst	787238
R52797	DBEst	814699
AA485401	DBEst	2214620
AA460756	DBEst	2185876
W55997	DBEst	1357886
AA064715	DBEst	1558807
AA486849	DBEst	2217013
AA457047	DBEst	2179767
R39356	DBEst	796812
AA487637	DBEst	2217801
AA025779	DBEst	1491144

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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R65622	DBEst	838260
H47475	DBEst	923527
R17054	DBEst	770664
R68997	DBEst	842514
H47542	DBEst	923594
T72691	DBEst	689366
T90374	DBEst	718887
N64431	DBEst	1212260
R69798	DBEst	843315
H78855	DBEst	1056944
R69934	DBEst	843451
H47929	DBEst	923981
R94591	DBEst	969986
N67006	DBEst	1219131
R38133	DBEst	795589
R07695	DBEst	759618
N99539	DBEst	1270952
R70140	DBEst	843657
W60845	DBEst	1367603
H48115	DBEst	924167
T96731	DBEst	735355
R70318	DBEst	843835
T90794	DBEst	722707
R92412	DBEst	959952
H91337	DBEst	1081767
H47863	DBEst	923915
H93842	DBEst	1101138
N71365	DBEst	1227945
AA427782	DBEst	2112362
H66442	DBEst	1025182
W68559	DBEst	1377428
H48389	DBEst	986776
AA456598	DBEst	2179174
W47576	DBEst	1332227
AA620759	DBEst	2524698
H93604	DBEst	1099932
N72009	DBEst	1228721
N24581	DBEst	1138731
AA454745	DBEst	2177521
W15465	DBEst	1289894
N54244	DBEst	1195410
N91202	DBEst	1444529
H94043	DBEst	1101339
H91121	DBEst	1081551
W86376	DBEst	1398137
H70120	DBEst	1040326
H94262	DBEst	1101558
H66856	DBEst	1025596
N24645	DBEst	1138795
H68719	DBEst	1030648
AA284259	DBEst	1928592
T67261	DBEst	676701
AA148641	DBEst	1718882
AA026686	DBEst	1492485
AA464741	DBEst	2189625

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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H73013	DBEst	1046553
AA055829	DBEst	1548304
H37774	DBEst	907273
H04985	DBEst	868537
AA487452	DBEst	2217616
AA418846	DBEst	2080665
H30688	DBEst	901598
H23021	DBEst	891716
AA464644	DBEst	2189528
H39187	DBEst	908686
N38959	DBEst	1162166
AA398230	DBEst	2051475
T71879	DBEst	686400
AA457114	DBEst	2179834
R99749	DBEst	986350
AA402879	DBEst	2056633
T67053	DBEst	676493
T71284	DBEst	685805
W88899	DBEst	1404381
T72235	DBEst	686756
R89492	DBEst	954319
AA488073	DBEst	2215504
T94293	DBEst	727781
AA279147	DBEst	1920613
N71653	DBEst	1228365
H51574	DBEst	991415
R51912	DBEst	813814
AA054358	DBEst	1545302
H15842	DBEst	880662
N67034	DBEst	1219159
T95657	DBEst	734281
R10007	DBEst	761963
R40970	DBEst	821229
R70598	DBEst	844115
R92236	DBEst	959776
R08083	DBEst	760006
R42852	DBEst	819762
T95804	DBEst	734428
N28268	DBEst	1146504
T95953	DBEst	734577
R31107	DBEst	786950
H75578	DBEst	1049506
R07663	DBEst	759586
H65569	DBEst	1024309
N68390	DBEst	1224551
H68724	DBEst	1030653
R55184	DBEst	824479
R06544	DBEst	757164
R00151	DBEst	749887
R63407	DBEst	835286
H95823	DBEst	1108965
R14602	DBEst	768770
T96035	DBEst	734659
T90201	DBEst	718714
T96077	DBEst	734701

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
R31426	DBEst	787269
AA026562	DBEst	1492896
R38239	DBEst	795695
N62695	DBEst	1210524
T96215	DBEst	734839
N72540	DBEst	1229644
H57242	DBEst	1010074
R00608	DBEst	750344
H77797	DBEst	1055886
W03793	DBEst	1275790
H63760	DBEst	1018561
R96208	DBEst	981868
H37880	DBEst	907379
N48139	DBEst	1189305
H54188	DBEst	994335
N72321	DBEst	1229425
R91215	DBEst	958755
H72388	DBEst	1044204
T83829	DBEst	712117
H54423	DBEst	994570
N91231	DBEst	1444558
R96436	DBEst	982096
N92136	DBEst	1264445
N29914	DBEst	1148434
H54609	DBEst	995135
N57713	DBEst	1201603
N53453	DBEst	1194619
R98262	DBEst	983922
N90246	DBEst	1443573
H73329	DBEst	1047091
W02016	DBEst	1274015
AA458646	DBEst	2183553
H54811	DBEst	995231
R99287	DBEst	985888
R96561	DBEst	982221
H52623	DBEst	992464
N38801	DBEst	1162008
R96586	DBEst	982246
N91731	DBEst	1264040
N59638	DBEst	1203528
N74086	DBEst	1231371
N49439	DBEst	1190605
R96694	DBEst	982354
W19461	DBEst	1295492
H60119	DBEst	1012951
N99553	DBEst	1270966
W49563	DBEst	1337820
T87341	DBEst	715693
H59915	DBEst	1012747
AA406242	DBEst	2064223
R52542	DBEst	814444
T98886	DBEst	748623
AA401137	DBEst	2055027
AA459519	DBEst	2184426
T80232	DBEst	698741
H24707	DBEst	893606

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA029963	DBEst	1496219
AA456695	DBEst	2179271
N49629	DBEst	1190795
H17975	DBEst	884215
AA490688	DBEst	2219861
R66447	DBEst	839085
H98218	DBEst	1119103
R72075	DBEst	846107
T71886	DBEst	686407
AA456869	DBEst	2179589
AA291163	DBEst	1939150
AA488406	DBEst	2215837
R36175	DBEst	793076
H48420	DBEst	986807
H22856	DBEst	891551
R55130	DBEst	824359
R91296	DBEst	958836
T75041	DBEst	691803
R23089	DBEst	777977
AA278759	DBEst	1920287
T74606	DBEst	691281
H70099	DBEst	1040305
AA465479	DBEst	2191646
AA460727	DBEst	2185847
N77515	DBEst	1240216
AA034213	DBEst	1506023
AA281616	DBEst	1924295
R00395	DBEst	750131
R08109	DBEst	760032
H93550	DBEst	1099878
R71414	DBEst	844931
W32731	DBEst	1313722
H53791	DBEst	993938
N90368	DBEst	1443695
T77812	DBEst	695015
R72661	DBEst	846693
H60503	DBEst	1013335
R08275	DBEst	760198
R73075	DBEst	847107
R87194	DBEst	946007
H24616	DBEst	893515
H80423	DBEst	1058512
R12267	DBEst	765002
R90957	DBEst	958497
R08690	DBEst	760613
H96534	DBEst	1110020
H90603	DBEst	1081033
R91004	DBEst	958544
H67666	DBEst	1026406
N52394	DBEst	1193560
R91031	DBEst	958571
N80361	DBEst	1243062
R08761	DBEst	760684
R68721	DBEst	842238
H73661	DBEst	1046837
W95104	DBEst	1424222

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
W05000	DBEst	1277720
N77198	DBEst	1239776
H68932	DBEst	1030101
H95044	DBEst	1102677
W23541	DBEst	1300366
AA456611	DBEst	2179187
H77707	DBEst	1055796
AA404276	DBEst	2059000
H69004	DBEst	1030230
H95086	DBEst	1102719
H79650	DBEst	1057739
H71224	DBEst	1043040
AA457728	DBEst	2180448
N76873	DBEst	1239451
N77321	DBEst	1239899
N34751	DBEst	1155893
H77697	DBEst	1055786
R27733	DBEst	783868
N76878	DBEst	1239456
H69653	DBEst	1039859
N26072	DBEst	1140420
AA018134	DBEst	1481509
R06284	DBEst	756904
N55012	DBEst	1197891
R88764	DBEst	953591
AA115919	DBEst	1670936
AA490680	DBEst	2219853
H69582	DBEst	1039788
N72452	DBEst	1229556
H80215	DBEst	1058304
H74265	DBEst	1047611
H59000	DBEst	1011832
H82419	DBEst	1060508
R07167	DBEst	759090
AA486627	DBEst	2216791
N53169	DBEst	1194335
W86653	DBEst	1400529
H84153	DBEst	1062824
H82535	DBEst	1060624
AA450227	DBEst	2163977
AA459318	DBEst	2184225
R13434	DBEst	766510
AA497051	DBEst	2230372
R67147	DBEst	839785
AA598508	DBEst	2432091
AA160852	DBEst	1736218
AA496837	DBEst	2230158
AA442984	DBEst	2155659
N73030	DBEst	1230134
T63324	DBEst	667189
AA419108	DBEst	2078854
AA418564	DBEst	2080365
AA490920	DBEst	2220093
AA487560	DBEst	2217724
AA448755	DBEst	2162425
AA074677	DBEst	1614604

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
H52361	DBEst	992202
R63197	DBEst	835076
T96708	DBEst	735332
R92577	DBEst	960117
H48502	DBEst	988342
N55563	DBEst	1198442
R31965	DBEst	787808
R00628	DBEst	750364
T96780	DBEst	735404
N68424	DBEst	1224585
R00648	DBEst	750384
T96870	DBEst	735494
H65775	DBEst	1024515
R62241	DBEst	834120
T95503	DBEst	734127
R62288	DBEst	834167
T96909	DBEst	735533
T96919	DBEst	735543
W95346	DBEst	1425411
W21482	DBEst	1298124
R71190	DBEst	844707
N24268	DBEst	1138418
H58884	DBEst	1011716
AA031398	DBEst	1501359
R32751	DBEst	788594
R62653	DBEst	834532
R32754	DBEst	788597
N45440	DBEst	1186606
T97076	DBEst	735700
R32939	DBEst	788782
R96358	DBEst	982018
N66843	DBEst	1218968
H55897	DBEst	1004541
W04231	DBEst	1276339
AA043494	DBEst	1521433
H75898	DBEst	1050027
R97269	DBEst	982929
H56207	DBEst	1004851
N94385	DBEst	1266694
N67041	DBEst	1219166
W73792	DBEst	1383955
H80958	DBEst	1059047
W69471	DBEst	1378733
R97234	DBEst	982894
T70850	DBEst	685371
H56424	DBEst	1005068
N48213	DBEst	1189379
N54993	DBEst	1197872
H38086	DBEst	907585
H56438	DBEst	1005082
N91997	DBEst	1264306
AA404288	DBEst	2059012
N92034	DBEst	1264343
H56679	DBEst	1005323
W01993	DBEst	1273972
R32944	DBEst	788787

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<u>ACC NDM</u>	<u>DATABASE</u>	<u>GI NBR</u>
H95358	DBEst	1102991
H94571	DBEst	1102204
H56981	DBEst	1009813
R98074	DBEst	983734
W03686	DBEst	1275531
W73140	DBEst	1383275
W24161	DBEst	1300979
N92035	DBEst	1264344
H66611	DBEst	1025351
H57017	DBEst	1009849
H45617	DBEst	921669
R31168	DBEst	787011
AA418251	DBEst	2080080
AA436406	DBEst	2141320
AA465021	DBEst	2189905
R28294	DBEst	784429
R33154	DBEst	789012
H15707	DBEst	880527
N62620	DBEst	1210449
H64324	DBEst	1023064
R26070	DBEst	782205
AA406551	DBEst	2064544
N27227	DBEst	1141575
AA026631	DBEst	1492466
AA410591	DBEst	2069697
R97066	DBEst	982726
W01240	DBEst	1273219
R98851	DBEst	985452
AA085597	DBEst	1629410
AA486836	DBEst	2217000
H12312	DBEst	877132
N91426	DBEst	1444753
T99688	DBEst	749425
T87139	DBEst	715491
AA489261	DBEst	2218863
AA070226	DBEst	1577585
AA496810	DBEst	2230131
T51182	DBEst	653042
AA490981	DBEst	2220154
AA459588	DBEst	2184495
T99191	DBEst	748928
N59766	DBEst	1203656
AA027964	DBEst	1494116
T84996	DBEst	713348
R93354	DBEst	967520
R89539	DBEst	954366
H59056	DBEst	1011888
T96523	DBEst	735147
R88999	DBEst	953826
H95238	DBEst	1102871
R91821	DBEst	959361
R08866	DBEst	768849
R89218	DBEst	954045
R08883	DBEst	768859
N75715	DBEst	1238293
H93319	DBEst	1099647

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
T78571	DBEst	697080
T84381	DBEst	712669
R22088	DBEst	776869
R89285	DBEst	954112
W25368	DBEst	1303271
R09153	DBEst	761076
R22113	DBEst	776894
T79129	DBEst	697638
R22065	DBEst	776846
N58198	DBEst	1202088
N91290	DBEst	1444617
R89471	DBEst	954298
R09498	DBEst	761421
AA029041	DBEst	1496650
R22239	DBEst	777020
H95342	DBEst	1102975
N30706	DBEst	1149226
R27505	DBEst	783640
R86333	DBEst	944739
N77006	DBEst	1239584
W84612	DBEst	1395723
N64285	DBEst	1212114
AA024866	DBEst	1489790
H71314	DBEst	1043130
AA133167	DBEst	1689947
N78306	DBEst	1241007
AA004671	DBEst	1448208
N73611	DBEst	1230896
H72247	DBEst	1044063
AA485443	DBEst	2214662
N63646	DBEst	1211475
N34967	DBEst	1156109
H72290	DBEst	1044106
N94143	DBEst	1266452
AA009773	DBEst	1470576
H72259	DBEst	1044075
N95107	DBEst	1267416
H71854	DBEst	1043670
R94456	DBEst	969851
N69252	DBEst	1225413
N80384	DBEst	1243085
N48130	DBEst	1189296
N70072	DBEst	1226652
H70554	DBEst	1042321
W31675	DBEst	1312666
N50014	DBEst	1191180
AA453774	DBEst	2167443
AA393408	DBEst	2046429
N79669	DBEst	1242370
R90744	DBEst	958284
N92646	DBEst	1264955
AA453850	DBEst	2167519
T94293	DBEst	727781
AA487346	DBEst	2217510
W24246	DBEst	1301071
R22306	DBEst	777087

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
W07798	DBEst	1281878
AA598950	DBEst	2432622
R31701	DBEst	787544
AA017526	DBEst	1479679
T46924	DBEst	648907
AA488699	DBEst	2218301
AA490256	DBEst	2219429
AA489246	DBEst	2218848
AA456868	DBEst	2179588
AA405000	DBEst	2063210
H54629	DBEst	994996
AA114226	DBEst	1668119
W32272	DBEst	1313264
T53626	DBEst	655486
H79353	DBEst	1057442
T97080	DBEst	735704
R62926	DBEst	834805
R68537	DBEst	842054
R01348	DBEst	751084
N77671	DBEst	1240372
R63134	DBEst	835013
R33265	DBEst	789123
R63137	DBEst	835016
N59057	DBEst	1202947
W81562	DBEst	1392591
N95381	DBEst	1267653
R99573	DBEst	986174
R66101	DBEst	838739
R63295	DBEst	835174
R33570	DBEst	789428
R66533	DBEst	839171
T97309	DBEst	746654
T97427	DBEst	746772
R33699	DBEst	789557
R39730	DBEst	797186
AA053285	DBEst	1545744
R98107	DBEst	983767
W30810	DBEst	1311820
T95668	DBEst	734292
R98191	DBEst	983851
AA488072	DBEst	2215503
H98856	DBEst	1123524
AA447569	DBEst	2161239
H57111	DBEst	1009943
R27412	DBEst	783547
AA129089	DBEst	1688934
H94849	DBEst	1102482
AA044662	DBEst	1523042
H57273	DBEst	1010105
W72621	DBEst	1382461
AA284234	DBEst	1928534
H58001	DBEst	1010833
R10043	DBEst	761999
H65231	DBEst	1023971
H64095	DBEst	1018896
AA434160	DBEst	2139074

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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N94060	DBEst	1266369
N29986	DBEst	1148506
H77736	DBEst	1055825
AA446839	DBEst	2159504
AA621342	DBEst	2525281
R98591	DBEst	985192
R21425	DBEst	776206
R36070	DBEst	792971
H58574	DBEst	1011406
H12777	DBEst	877597
R16134	DBEst	767943
R98905	DBEst	985506
N94274	DBEst	1266583
N40919	DBEst	1164517
W76645	DBEst	1386909
R71393	DBEst	844910
R98913	DBEst	985514
H58834	DBEst	1011666
AA031513	DBEst	1501467
AA126115	DBEst	1685781
W58032	DBEst	1364815
AA401693	DBEst	2057177
AA399334	DBEst	2053071
AA143201	DBEst	1712768
N99243	DBEst	1269645
H44956	DBEst	921008
T52435	DBEst	654295
AA402207	DBEst	2056178
AA227594	DBEst	1849138
W74377	DBEst	1384792
R24635	DBEst	779523
AA058828	DBEst	1551654
T51350	DBEst	653210
H28922	DBEst	899832
AA452376	DBEst	2166045
R02800	DBEst	752536
R26164	DBEst	782299
T97139	DBEst	735763
AA186901	DBEst	1775003
AA443093	DBEst	2155768
H26176	DBEst	895299
AA463565	DBEst	2188449
T82817	DBEst	711105
AA448998	DBEst	2163018
AA486626	DBEst	2216790
R66057	DBEst	838695
AA001449	DBEst	1436914
T51689	DBEst	653549
N78263	DBEst	1240964
R68706	DBEst	842223
H97748	DBEst	1118633
H83233	DBEst	1061903
R68736	DBEst	842253
R89862	DBEst	954689
H66877	DBEst	1025617

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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H66650	DBEst	1025390
N92134	DBEst	1264443
R91060	DBEst	958600
H98001	DBEst	1118886
N90491	DBEst	1443818
R78527	DBEst	854808
R91176	DBEst	958716
AA029361	DBEst	1496765
W01171	DBEst	1273169
T91086	DBEst	722999
R22420	DBEst	777201
AA402879	DBEst	2056633
R91244	DBEst	958784
N78103	DBEst	1240804
R91271	DBEst	958811
H70962	DBEst	1042778
R22926	DBEst	777814
R10311	DBEst	762267
T84865	DBEst	713217
R92649	DBEst	960189
N49436	DBEst	1190602
W02424	DBEst	1274545
AA284305	DBEst	1928604
H72700	DBEst	1044516
H73304	DBEst	1046425
R06372	DBEst	756992
AA149640	DBEst	1720441
W02630	DBEst	1274608
W58368	DBEst	1365081
W23546	DBEst	1300371
R33082	DBEst	788940
N54401	DBEst	1195721
AA461108	DBEst	2186228
R19406	DBEst	773016
N79558	DBEst	1242259
N95656	DBEst	1267963
R62339	DBEst	834218
W00899	DBEst	1272879
T97257	DBEst	746602
N49224	DBEst	1190390
AA454702	DBEst	2177478
W81128	DBEst	1391342
N34362	DBEst	1155504
H69471	DBEst	1039677
H79130	DBEst	1057219
H74330	DBEst	1047741
N45364	DBEst	1186530
W69791	DBEst	1379049
AA458882	DBEst	2183789
W02256	DBEst	1274254
AA155695	DBEst	1727311
R00822	DBEst	750558
AA069596	DBEst	1576955
AA427667	DBEst	2111484
R22412	DBEst	777193

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA235332	DBEst	1859770
AA456931	DBEst	2179651
AA486275	DBEst	2216491
N74383	DBEst	1231668
AA056148	DBEst	1548486
AA460827	DBEst	2185947
AA459039	DBEst	2183946
AA480906	DBEst	2210458
AA250771	DBEst	1885736
H58873	DBEst	1011705
AA443506	DBEst	2156181
AA160507	DBEst	1735874
AA460330	DBEst	2185146
AA464250	DBEst	2189134
AA452966	DBEst	2166635
AA448599	DBEst	2162269
AA598817	DBEst	2432489
R95740	DBEst	981400
AA410207	DBEst	2069168
R54050	DBEst	815952
AA496804	DBEst	2230125
AA448400	DBEst	2162070
H77772	DBEst	1055861
R63342	DBEst	835221
N92048	DBEst	1264357
R65963	DBEst	838601
N74882	DBEst	1237561
R63782	DBEst	835661
R33780	DBEst	789638
R00332	DBEst	750068
R64408	DBEst	836287
W23522	DBEst	1300357
R08359	DBEst	760282
R64449	DBEst	836328
T97794	DBEst	747139
R63980	DBEst	835859
H91404	DBEst	1081834
W02403	DBEst	1274383
T97809	DBEst	747154
W93510	DBEst	1422631
R34013	DBEst	789871
R16009	DBEst	767991
R34957	DBEst	791858
R49470	DBEst	820368
T97870	DBEst	747215
N57848	DBEst	1201738
N64033	DBEst	1211862
T69709	DBEst	680857
N95642	DBEst	1267930
N64840	DBEst	1212669
H58866	DBEst	1011698
R93009	DBEst	965363
R28280	DBEst	784415
N78198	DBEst	1240899

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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R98774	DBEst	985375
N70298	DBEst	1226878
R31521	DBEst	787364
W85892	DBEst	1398321
H90746	DBEst	1081176
H65942	DBEst	1024682
W04272	DBEst	1276171
R63996	DBEst	835875
H59188	DBEst	1012020
H77737	DBEst	1055826
R98947	DBEst	985548
W05026	DBEst	1277746
R08563	DBEst	768791
N66845	DBEst	1218970
R98948	DBEst	985549
R69645	DBEst	843162
H85454	DBEst	1064476
N73510	DBEst	1230795
W01511	DBEst	1273491
R99004	DBEst	985605
W86431	DBEst	1400198
AA044205	DBEst	1522062
H65984	DBEst	1024724
N54161	DBEst	1195327
H90899	DBEst	1081329
AA460152	DBEst	2185537
R99627	DBEst	986228
N71473	DBEst	1228185
W60647	DBEst	1367620
H59670	DBEst	1012502
N52350	DBEst	1193516
H56033	DBEst	1004677
AA063574	DBEst	1557523
AA455911	DBEst	2178687
H97778	DBEst	1118663
H06113	DBEst	869665
AA478436	DBEst	2207070
W76376	DBEst	1386600
H24688	DBEst	893587
AA486471	DBEst	2216635
W58658	DBEst	1365390
N64862	DBEst	1212691
AA417654	DBEst	2079473
W01011	DBEst	1272990
AA456160	DBEst	2179370
T98152	DBEst	747497
AA430504	DBEst	2111094
AA497051	DBEst	2230372
AA453816	DBEst	2167485
H65526	DBEst	1024266
AA598572	DBEst	2432155
AA451891	DBEst	2165560
T49539	DBEst	651399
AA480859	DBEst	2210411

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA011320	DBEst	1472367
H79888	DBEst	1057977
T64625	DBEst	673670
AA453105	DBEst	2166774
R99423	DBEst	986024
AA151486	DBEst	1719991
AA486524	DBEst	2216688
AA455062	DBEst	2177838
N53177	DBEst	1194343
AA489714	DBEst	2219316
AA489017	DBEst	2218619
N59542	DBEst	1203432
N54296	DBEst	1195616
N21309	DBEst	1126479
R11529	DBEst	764264
H43657	DBEst	919709
T84869	DBEst	713221
R23055	DBEst	777943
R62780	DBEst	834659
H27590	DBEst	897943
W00973	DBEst	1272952
R95916	DBEst	981576
T80718	DBEst	703603
R91904	DBEst	959444
R23097	DBEst	777985
H64244	DBEst	1022984
R31831	DBEst	787674
T84965	DBEst	713317
R91557	DBEst	959097
H63668	DBEst	1018469
N52406	DBEst	1193572
W76603	DBEst	1386848
H53893	DBEst	994040
T97616	DBEst	746961
H56088	DBEst	1004732
H66312	DBEst	1025052
R97050	DBEst	982710
N99519	DBEst	1270944
H37846	DBEst	907345
R26094	DBEst	782229
N75669	DBEst	1238247
R92032	DBEst	959572
R33841	DBEst	789699
H80558	DBEst	1058647
R14894	DBEst	769167
R92285	DBEst	959825
R21785	DBEst	776566
R19183	DBEst	772793
AA025807	DBEst	1491173
R92292	DBEst	959832
AA427732	DBEst	2111573
H73608	DBEst	1046440
AA485365	DBEst	2214584
R26929	DBEst	783064
H77714	DBEst	1055803
AA040269	DBEst	1516674

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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N26802	DBEst	1141150
N49375	DBEst	1190541
H82532	DBEst	1060621
AA453273	DBEst	2166942
W58342	DBEst	1365125
H79046	DBEst	1057135
T83394	DBEst	711682
N49996	DBEst	1191162
R66945	DBEst	839583
AA004664	DBEst	1448201
N99803	DBEst	1271317
N49895	DBEst	1191061
R22252	DBEst	777033
N74059	DBEst	1231344
T86603	DBEst	714955
AA126825	DBEst	1687596
R07594	DBEst	759517
AA485683	DBEst	2214902
N57927	DBEst	1201817
AA045257	DBEst	1523461
R92163	DBEst	959703
AA464605	DBEst	2189489
H02340	DBEst	865273
T67549	DBEst	678697
AA497085	DBEst	2230406
AA453831	DBEst	2167500
H09914	DBEst	874736
AA453728	DBEst	2167397
H70473	DBEst	1042340
AA459197	DBEst	2184104
N91990	DBEst	1264299
H57180	DBEst	1010012
H71868	DBEst	1043684
R41839	DBEst	817543
H22563	DBEst	891258
AA405769	DBEst	2063875
N76581	DBEst	1239159
H02158	DBEst	865091
R49999	DBEst	811901
R40400	DBEst	822829
W67323	DBEst	1376231
AA453338	DBEst	2167007
H16573	DBEst	882798
AA453410	DBEst	2167079
H21041	DBEst	889736
H23187	DBEst	891882
AA598776	DBEst	2432448
AA485983	DBEst	2216199
AA026609	DBEst	1492444
AA283693	DBEst	1927905
AA461506	DBEst	2185370
AA279883	DBEst	1921348
H14841	DBEst	879661
AA448478	DBEst	2162148
H75547	DBEst	1050147

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<u>ACC NOM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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H62162	DBEst	1014994
AA026112	DBEst	1492171
AA459588	DBEst	2184495
H09614	DBEst	874436
AA447098	DBEst	2159763
AA195959	DBEst	1791550
N91385	DBEst	1444712
AA504617	DBEst	2240777
AA476543	DBEst	2204754
N59716	DBEst	1203606
T97889	DBEst	747234
R02718	DBEst	752454
R99311	DBEst	985912
R35253	DBEst	792154
R02820	DBEst	752556
T77847	DBEst	695050
N68497	DBEst	1224658
R10015	DBEst	761971
N77205	DBEst	1239783
T98075	DBEst	747420
T74714	DBEst	691389
N45244	DBEst	1186410
R66994	DBEst	839632
T98615	DBEst	748352
R36181	DBEst	793082
N80491	DBEst	1243192
R05837	DBEst	756457
T98098	DBEst	747443
R09301	DBEst	761224
R68634	DBEst	842151
H48445	DBEst	986832
H48467	DBEst	986854
N71565	DBEst	1228277
H60317	DBEst	1013149
R36006	DBEst	792907
W01645	DBEst	1273644
H60491	DBEst	1013323
R68272	DBEst	841789
W02401	DBEst	1274381
H60523	DBEst	1013355
N35301	DBEst	1156443
R99386	DBEst	985987
W02591	DBEst	1274569
H23963	DBEst	892658
H60688	DBEst	1013520
R99682	DBEst	986283
R78580	DBEst	854861
R24258	DBEst	779146
AA464202	DBEst	2189086
R99690	DBEst	986291
W00793	DBEst	1273006
N51521	DBEst	1192687
H65052	DBEst	1023792
T80848	DBEst	703733
AA013240	DBEst	1474267

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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H69576	DBEst	1039782
R99938	DBEst	986539
W01026	DBEst	1273025
H78097	DBEst	1056186
H61684	DBEst	1014516
W04152	DBEst	1276190
AA460168	DBEst	2185553
H75690	DBEst	1049633
T99674	DBEst	749411
H48318	DBEst	986705
N76193	DBEst	1238771
H62166	DBEst	1014998
H79007	DBEst	1057096
R40794	DBEst	823045
R39464	DBEst	796920
AA458884	DBEst	2183791
N91584	DBEst	1444911
H09936	DBEst	874758
T98783	DBEst	748520
H46663	DBEst	922715
AA405891	DBEst	2063892
AA480815	DBEst	2210367
AA100296	DBEst	1646587
H15634	DBEst	880454
H20872	DBEst	889567
AA424516	DBEst	2103477
AA426311	DBEst	2107791
AA458472	DBEst	2183379
T75436	DBEst	692198
R35665	DBEst	792566
AA598652	DBEst	2432235
AA258396	DBEst	1893538
AA486305	DBEst	2216521
AA046411	DBEst	1526376
AA010609	DBEst	1471635
AA481277	DBEst	2210829
AA521346	DBEst	2261889
H65260	DBEst	1024000
AA459380	DBEst	2184287
R08755	DBEst	768817
AA521243	DBEst	2261786
AA292995	DBEst	1940908
H14804	DBEst	879624
R92495	DBEst	960035
AA486367	DBEst	2215173
AA608548	DBEst	2456976
AA481547	DBEst	2211099
R89083	DBEst	953910
H57830	DBEst	1010662
AA458533	DBEst	2183440
T81261	DBEst	704146
R25980	DBEst	782115
H38148	DBEst	907647
H50871	DBEst	990712
R92310	DBEst	959850

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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H94163	DBEst	1101459
R23952	DBEst	778840
N54407	DBEst	1195727
R31154	DBEst	786997
R92347	DBEst	959887
R92435	DBEst	959975
R74357	DBEst	848727
R92545	DBEst	960085
H52534	DBEst	992375
R92455	DBEst	959995
N39325	DBEst	1162532
T64956	DBEst	674001
R34121	DBEst	789979
R16431	DBEst	770041
R83017	DBEst	927861
R91948	DBEst	959488
N33927	DBEst	1154327
T95151	DBEst	733775
N94181	DBEst	1266490
H63223	DBEst	1018024
T64881	DBEst	673926
H94236	DBEst	1101532
H78863	DBEst	1056952
N64671	DBEst	1212500
H94934	DBEst	1102567
H55966	DBEst	1004610
W02483	DBEst	1274481
R25114	DBEst	780002
N49231	DBEst	1190397
N49774	DBEst	1190940
AA431972	DBEst	2115680
H79613	DBEst	1057702
T97590	DBEst	746935
N95217	DBEst	1267498
H93393	DBEst	1099721
W86660	DBEst	1400536
N52254	DBEst	1193388
H55784	DBEst	1004428
N23753	DBEst	1137903
H25846	DBEst	894969
AA464517	DBEst	2189401
N52535	DBEst	1193701
AA031770	DBEst	1501772
H80336	DBEst	1058425
AA448484	DBEst	2162154
W90001	DBEst	1405979
N73555	DBEst	1230840
W86466	DBEst	1400213
N72384	DBEst	1229488
AA427978	DBEst	2112197
H77506	DBEst	1055595
H80724	DBEst	1058813
AA046424	DBEst	1526335
AA434390	DBEst	2139304
AA464739	DBEst	2189623

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA427521	DBEst	2112261
N73227	DBEst	1230331
R89581	DBEst	954408
H81048	DBEst	1059137
H75632	DBEst	1049954
H69528	DBEst	1039734
N53167	DBEst	1194333
W90749	DBEst	1406715
N52978	DBEst	1194144
R31218	DBEst	787061
T67223	DBEst	676663
R26396	DBEst	782531
R67903	DBEst	840541
N21592	DBEst	1126762
W38022	DBEst	1319616
AA046112	DBEst	1526005
N35892	DBEst	1157034
R26456	DBEst	782591
W93682	DBEst	1422804
T97650	DBEst	746995
W93847	DBEst	1422970
AA431721	DBEst	2115429
N67839	DBEst	1219964
AA004415	DBEst	1448060
H72368	DBEst	1044184
T90971	DBEst	722884
N81017	DBEst	1243718
H68542	DBEst	1027282
AA284267	DBEst	1928600
N69908	DBEst	1226488
AA454710	DBEst	2177486
AA009677	DBEst	1470500
R55630	DBEst	824925
H54419	DBEst	994566
AA284307	DBEst	1928606
AA026666	DBEst	1492483
H56029	DBEst	1004673
H70608	DBEst	1042424
W02753	DBEst	1274731
AA284249	DBEst	1928549
N53564	DBEst	1194730
W16659	DBEst	1291258
H64150	DBEst	1018951
W32303	DBEst	1313314
AA156030	DBEst	1727655
AA022949	DBEst	1487039
AA151265	DBEst	1719475
AA011347	DBEst	1472394
W69170	DBEst	1378451
H86518	DBEst	1068097
AA128005	DBEst	1687285
H59063	DBEst	1011895
W74254	DBEst	1384502
AA058709	DBEst	1551517
AA128362	DBEst	1688412

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA112979	DBEst	1664450
AA058323	DBEst	1551160
T71965	DBEst	686486
AA701545	DBEst	2704710
AA609655	DBEst	2458083
AA676804	DBEst	2657326
H61243	DBEst	1014075
T61938	DBEst	665181
AA644448	DBEst	2569666
AA626787	DBEst	2539174
AA291556	DBEst	1939730
R43605	DBEst	821525
AA634464	DBEst	2557678
AA479691	DBEst	2205577
AA412064	DBEst	2070830
T62552	DBEst	666209
AA400186	DBEst	2054057
T49236	DBEst	651096
R52794	DBEst	814696
H88329	DBEst	1069908
T49309	DBEst	651169
T62849	DBEst	666506
AA454813	DBEst	2177589
AA074222	DBEst	1614091
AA633577	DBEst	2556791
R44850	DBEst	824225
AA432106	DBEst	2115814
H16989	DBEst	883229
N53031	DBEst	1194197
AA148213	DBEst	1717719
N33258	DBEst	1153657
R44955	DBEst	824309
R44717	DBEst	824095
H15296	DBEst	880116
AA159578	DBEst	1735129
R43721	DBEst	821635
AA630628	DBEst	2553239
AA400234	DBEst	2054248
H15696	DBEst	880516
AA678021	DBEst	2658543
AA486072	DBEst	2216288
H08862	DBEst	873684
H10983	DBEst	875803
N66750	DBEst	1218875
N73448	DBEst	1230733
H11718	DBEst	876538
R52522	DBEst	814424
AA088214	DBEst	1633717
W87714	DBEst	1401768
N38891	DBEst	1162098
R10675	DBEst	762631
W93067	DBEst	1422239
W80688	DBEst	1391779
AA043790	DBEst	1521675
R95841	DBEst	981501

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA063598	DBEst	1557565
N35156	DBEst	1156298
W46629	DBEst	1331257
N73309	DBEst	1230413
AA456629	DBEst	2179205
AA046700	DBEst	1524597
AA033991	DBEst	1505800
AA485739	DBEst	2214958
AA496438	DBEst	2229759
AA034058	DBEst	1505867
AA669055	DBEst	2630554
T51539	DBEst	653399
AA025246	DBEst	1490188
N91145	DBEst	1444472
AA017544	DBEst	1479697
AA176581	DBEst	1757705
AA115761	DBEst	1670792
AA625655	DBEst	2538042
N92699	DBEst	1265008
AA136666	DBEst	1697894
AA453485	DBEst	2167154
N33274	DBEst	1153673
N26175	DBEst	1140523
AA702422	DBEst	2705535
AA443587	DBEst	2156262
AA454098	DBEst	2167767
W45688	DBEst	1329778
R44930	DBEst	823197
AA460838	DBEst	2185958
AA487543	DBEst	2217707
R54034	DBEst	815936
AA496149	DBEst	2229470
H08210	DBEst	873032
T82459	DBEst	709661
H13688	DBEst	878508
R52030	DBEst	813932
T82461	DBEst	709663
AA291749	DBEst	1939745
R44840	DBEst	824215
H11003	DBEst	875823
R59197	DBEst	829892
H15114	DBEst	879934
AA150500	DBEst	1722014
T87226	DBEst	715578
AA629707	DBEst	2552318
R44530	DBEst	823920
H08226	DBEst	873048
H11454	DBEst	876274
T88939	DBEst	717452
H15153	DBEst	879973
AA012939	DBEst	1473966
R27615	DBEst	783750
R39111	DBEst	796567
R54073	DBEst	815975
H15288	DBEst	880108

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA458878	DBEst	2183785
H22566	DBEst	891261
H98215	DBEst	1119100
H99837	DBEst	1124505
H18932	DBEst	885172
AA160670	DBEst	1736055
N62914	DBEst	1210743
AA176819	DBEst	1757951
R52681	DBEst	814583
N36130	DBEst	1157272
R10823	DBEst	763558
R58985	DBEst	829680
T55997	DBEst	657858
AA102053	DBEst	1645893
R53258	DBEst	815160
AA487070	DBEst	2217234
AA600184	DBEst	2433809
AA428603	DBEst	2112796
H08206	DBEst	873028
R56100	DBEst	826206
AA454713	DBEst	2177489
H17034	DBEst	883274
H17513	DBEst	883753
AA496871	DBEst	2230192
R55673	DBEst	824968
T47625	DBEst	649605
T57359	DBEst	659220
AA121697	DBEst	1679329
AA443099	DBEst	2155774
T72336	DBEst	686857
R44714	DBEst	824092
T96605	DBEst	735229
N51838	DBEst	1193004
R27975	DBEst	784110
N57858	DBEst	1201748
N72228	DBEst	1229332
N29918	DBEst	1148438
R95867	DBEst	981527
R28660	DBEst	784795
H79538	DBEst	1057627
AA459278	DBEst	2184185
N32502	DBEst	1152901
R05293	DBEst	755913
AA404278	DBEst	2059002
R31262	DBEst	787105
N72976	DBEst	1230080
N25798	DBEst	1140146
W46433	DBEst	1331063
N71028	DBEst	1227608
AA005219	DBEst	1448681
AA099820	DBEst	1645919
H59618	DBEst	1012450
N93721	DBEst	1266030
R01448	DBEst	751184
W72972	DBEst	1383115

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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W37628	DBEst	1319280
N70553	DBEst	1227133
H60514	DBEst	1013346
W37680	DBEst	1319294
AA425900	DBEst	2107823
N23454	DBEst	1137604
R73661	DBEst	848031
W87801	DBEst	1401886
AA134111	DBEst	1691323
AA625632	DBEst	2538019
W72294	DBEst	1382897
N54456	DBEst	1195776
H90296	DBEst	1080726
W81504	DBEst	1392553
AA085759	DBEst	1629221
AA676840	DBEst	2657362
N70759	DBEst	1227339
AA428959	DBEst	2110501
T49530	DBEst	651390
AA701081	DBEst	2704246
H10981	DBEst	875801
N20338	DBEst	1125293
T49802	DBEst	651662
H23081	DBEst	891776
W73473	DBEst	1383605
T50041	DBEst	651901
T64216	DBEst	668081
R80779	DBEst	857060
T62577	DBEst	666234
AA682815	DBEst	2669498
H17115	DBEst	883355
T50121	DBEst	651981
R54846	DBEst	818968
N58558	DBEst	1202448
T51290	DBEst	653150
R66415	DBEst	839053
T40668	DBEst	648271
R52635	DBEst	814537
H22956	DBEst	891651
R53442	DBEst	815344
H19417	DBEst	888112
AA088861	DBEst	1634391
N48899	DBEst	1190065
R42698	DBEst	819643
H19217	DBEst	885457
W46577	DBEst	1331242
H23256	DBEst	891951
AA664180	DBEst	2618171
H24347	DBEst	893042
AA621256	DBEst	2525195
R56432	DBEst	826538
R54558	DBEst	816460
T41032	DBEst	648609

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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T98628	DBEst	748365
AA464578	DBEst	2189462
AA010557	DBEst	1471603
W91885	DBEst	1424267
AA458486	DBEst	2183393
N62273	DBEst	1210102
N34637	DBEst	1155779
W90323	DBEst	1406703
H70603	DBEst	1042419
N50962	DBEst	1192128
N62080	DBEst	1210009
H49517	DBEst	989358
AA457718	DBEst	2180438
R99293	DBEst	985894
AA147654	DBEst	1717025
AA004652	DBEst	1448189
H48251	DBEst	986638
AA664195	DBEst	2618186
N31948	DBEst	1152347
AA041396	DBEst	1517630
AA669689	DBEst	2631188
AA016234	DBEst	1477281
N63943	DBEst	1211772
W86521	DBEst	1400378
H65478	DBEst	1024218
W73144	DBEst	1383279
AA448167	DBEst	2161837
N36123	DBEst	1157265
AA402883	DBEst	2056637
AA630328	DBEst	2552939
N52136	DBEst	1193397
N30553	DBEst	1149073
AA001432	DBEst	1437117
R39069	DBEst	796525
AA055585	DBEst	1547950
AA455521	DBEst	2178297
H09064	DBEst	873886
H17929	DBEst	884169
H11453	DBEst	876273
H08541	DBEst	873363
H17322	DBEst	883562
AA430675	DBEst	2111248
AA427899	DBEst	2111679
H17484	DBEst	883724
R42894	DBEst	819802
AA405800	DBEst	2063783
T89084	DBEst	717597
R66139	DBEst	838777
AA630320	DBEst	2552931
T48692	DBEst	650552
R52796	DBEst	814698
R91539	DBEst	959079
R44647	DBEst	824031
R31562	DBEst	787405
AA405901	DBEst	2064095

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
H29245	DBEst	900155
AA425316	DBEst	2106072
N73101	DBEst	1230205
H17954	DBEst	884194
H22946	DBEst	891641
N58372	DBEst	1202262
H28738	DBEst	899692
R54177	DBEst	816079
N51705	DBEst	1192871
H99659	DBEst	1124327
T52652	DBEst	654512
T72915	DBEst	689590
AA176867	DBEst	1758071
AA426113	DBEst	2106585
H17046	DBEst	883286
AA479913	DBEst	2204395
R20662	DBEst	775443
AA490249	DBEst	2221068
AA099748	DBEst	1645859
H09759	DBEst	874581
R56769	DBEst	826875
H08734	DBEst	873556
N20577	DBEst	1125532
H98780	DBEst	1123448
R33037	DBEst	788880
H99394	DBEst	1124062
N35889	DBEst	1157031
AA431746	DBEst	2115454
AA460282	DBEst	2185098
AA029331	DBEst	1496820
N27145	DBEst	1141493
AA443105	DBEst	2155780
AA063573	DBEst	1557522
W93147	DBEst	1422516
AA010619	DBEst	1471645
AA011678	DBEst	1472724
AA001983	DBEst	1445418
N59219	DBEst	1203109
AA039857	DBEst	1516135
R17096	DBEst	770706
N72116	DBEst	1229220
AA001359	DBEst	1437463
AA011480	DBEst	1472507
W80701	DBEst	1391719
AA136049	DBEst	1697259
N68738	DBEst	1224899
AA151111	DBEst	1722660
AA454864	DBEst	2177640
N70734	DBEst	1227314
AA035745	DBEst	1507573
N54157	DBEst	1195323
AA041293	DBEst	1517510
R86970	DBEst	945711
AA133194	DBEst	1689956
H66670	DBEst	1025410
N63949	DBEst	1211778

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
R11047	DBEst	763782
R91689	DBEst	959229
H66710	DBEst	1025450
AA464728	DBEst	2189612
W90128	DBEst	1406118
N74625	DBEst	1231910
AA464140	DBEst	2189024
N32811	DBEst	1153210
N63848	DBEst	1211677
AA434388	DBEst	2139302
W93523	DBEst	1422644
R99847	DBEst	986448
T51592	DBEst	653452
H68885	DBEst	1030115
AA401441	DBEst	2053649
T51995	DBEst	653855
AA181333	DBEst	1764816
T55592	DBEst	657453
W63749	DBEst	1371329
R43271	DBEst	821378
R73584	DBEst	847616
H23265	DBEst	891960
T54144	DBEst	656005
T70032	DBEst	681180
R83277	DBEst	928154
R59167	DBEst	829862
T52325	DBEst	654185
AA683102	DBEst	2668993
AA699732	DBEst	2702695
H94471	DBEst	1102104
T71578	DBEst	686099
R44538	DBEst	823927
R44564	DBEst	823953
H10226	DBEst	875048
H09620	DBEst	874442
AA476294	DBEst	2204505
AA504858	DBEst	2241018
H24327	DBEst	893022
R52786	DBEst	814688
H15250	DBEst	880070
T48011	DBEst	649991
H18456	DBEst	884696
H17063	DBEst	883303
T61888	DBEst	665131
H23482	DBEst	892177
T48649	DBEst	650509
H17981	DBEst	884221
H09317	DBEst	874139
AA412509	DBEst	2071079
H19312	DBEst	885552
R44210	DBEst	822073
H11448	DBEst	876268
AA150532	DBEst	1722088
AA461511	DBEst	2185375
H15653	DBEst	880473
AA426049	DBEst	2106537

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA460304	DBEst	2185120
AA485730	DBEst	2214949
AA011598	DBEst	1472705
AA024832	DBEst	1489746
W87710	DBEst	1401764
N91962	DBEst	1264271
H51050	DBEst	990891
AA011100	DBEst	1472128
AA043092	DBEst	1521193
H51271	DBEst	991112
N51961	DBEst	1193127
N71147	DBEst	1227727
W92233	DBEst	1424598
AA029703	DBEst	1497143
AA485424	DBEst	2214643
N48700	DBEst	1189866
AA427733	DBEst	2111574
N91003	DBEst	1444330
H63959	DBEst	1018760
N40917	DBEst	1164515
N70848	DBEst	1227428
AA136889	DBEst	1698117
AA430629	DBEst	2112152
W51985	DBEst	1349239
AA629897	DBEst	2552508
N53360	DBEst	1194526
AA427778	DBEst	2112358
N40952	DBEst	1164550
AA677706	DBEst	2658228
AA043800	DBEst	1521713
AA455013	DBEst	2177789
R68106	DBEst	841623
AA001884	DBEst	1445269
N55355	DBEst	1198234
W81135	DBEst	1391349
AA429661	DBEst	2113038
AA115328	DBEst	1670508
AA127965	DBEst	1687227
AA460313	DBEst	2185129
AA629189	DBEst	2541576
H60298	DBEst	1013130
AA664179	DBEst	2618170
AA010000	DBEst	1471047
W15318	DBEst	1289768
AA017379	DBEst	1479590
AA455128	DBEst	2177904
R88992	DBEst	953819
W88725	DBEst	1404207
N67810	DBEst	1219935
H41144	DBEst	917196
AA133469	DBEst	1690437
AA679907	DBEst	2656374
N72210	DBEst	1229314
AA434411	DBEst	2139325
AA052932	DBEst	1543992
N40945	DBEst	1164543

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
H29276	DBEst	900186
R55658	DBEst	824953
N20106	DBEst	1124773
H10413	DBEst	875235
R37566	DBEst	795022
AA496334	DBEst	2229655
H29227	DBEst	900137
H45976	DBEst	922028
R54212	DBEst	816114
AA670155	DBEst	2631654
AA700322	DBEst	2703285
H09601	DBEst	874423
W72437	DBEst	1382363
AA122287	DBEst	1678526
AA461098	DBEst	2186218
AA404565	DBEst	2059307
AA443706	DBEst	2156381
AA448281	DBEst	2161951
AA045524	DBEst	1523760
H15695	DBEst	880515
H29303	DBEst	900213
AA469975	DBEst	2197284
AA446864	DBEst	2159529
AA011637	DBEst	1472674
AA463516	DBEst	2188400
T54672	DBEst	656533
AA496247	DBEst	2229568
AA608572	DBEst	2457000
AA211459	DBEst	1810104
AA460965	DBEst	2186085
T47971	DBEst	649951
H19307	DBEst	885547
AA446887	DBEst	2159552
AA425302	DBEst	2106058
AA010247	DBEst	1471363
H17143	DBEst	883383
AA135001	DBEst	1696102
T41173	DBEst	648736
N22552	DBEst	1128686
W92772	DBEst	1421925
N93740	DBEst	1266049
AA054722	DBEst	1545667
AA142842	DBEst	1712285
N57950	DBEst	1201840
N70059	DBEst	1226639
H91615	DBEst	1087193
AA448182	DBEst	2161852
N79989	DBEst	1242690
N72882	DBEst	1229986
AA455509	DBEst	2178285
N30655	DBEst	1149175
AA485428	DBEst	2214647
R99105	DBEst	985706
H54263	DBEst	994410
AA443594	DBEst	2156269
AA676998	DBEst	2657520

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
H58606	DBEst	1011438
AA457137	DBEst	2179857
AA663310	DBEst	2617301
AA284265	DBEst	1928598
AA479058	DBEst	2207614
AA458480	DBEst	2183387
W73889	DBEst	1382284
AA010223	DBEst	1471250
AA004525	DBEst	1448102
H73628	DBEst	1046496
R31793	DBEst	787636
R12679	DBEst	765755
AA284261	DBEst	1928594
AA284184	DBEst	1928529
H87459	DBEst	1069038
AA114966	DBEst	1670181
AA009593	DBEst	1470752
AA664040	DBEst	2618031
N32832	DBEst	1153231
AA284281	DBEst	1928563
H77494	DBEst	1055583
AA457115	DBEst	2179835
AA010188	DBEst	1471215
AA677306	DBEst	2657828
T90446	DBEst	718959
H98683	DBEst	1123351
N63598	DBEst	1211427
AA010406	DBEst	1471452
AA700419	DBEst	2703382
AA680407	DBEst	2656714
AA412217	DBEst	2070841
T72068	DBEst	686589
AA430665	DBEst	2111221
H68848	DBEst	1030358
R53527	DBEst	815429
H49511	DBEst	989352
AA630794	DBEst	2553405
T53431	DBEst	655291
T74566	DBEst	691241
AA677185	DBEst	2657707
AA292226	DBEst	1940362
H52110	DBEst	991951
AA668527	DBEst	2630026
AA630016	DBEst	2552627
H24352	DBEst	893047
R44353	DBEst	820649
AA454175	DBEst	2167844
AA488413	DBEst	2215844
H16701	DBEst	882941
AA045074	DBEst	1523555
AA489470	DBEst	2219072
H17511	DBEst	883751
H09778	DBEst	874600
H24355	DBEst	893050
AA186605	DBEst	1774780
H11270	DBEst	876090

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
H10204	DBEst	875026
H17625	DBEst	883865
N67816	DBEst	1219941
AA666180	DBEst	2620793
W86608	DBEst	1400355
AA456139	DBEst	2179349
H20757	DBEst	889452
AA486761	DBEst	2216925
T52375	DBEst	654235
H15436	DBEst	880256
H24018	DBEst	892713
H10993	DBEst	875813
T54643	DBEst	656504
H09245	DBEst	874067
T65736	DBEst	674781
AA464709	DBEst	2189593
T54673	DBEst	656534
R27457	DBEst	783592
AA610040	DBEst	2458468
H29231	DBEst	900141
H17506	DBEst	883746
W80361	DBEst	1391438
N39449	DBEst	1162656
W81603	DBEst	1392642
AA004719	DBEst	1448624
W91879	DBEst	1424261
AA457138	DBEst	2179858
H56640	DBEst	1005284
H90767	DBEst	1081197
W86630	DBEst	1400227
N71080	DBEst	1227660
H57060	DBEst	1009892
H57130	DBEst	1009962
W74802	DBEst	1385053
AA454861	DBEst	2177637
N59270	DBEst	1203160
AA429398	DBEst	2112353
W92514	DBEst	1424898
AA053296	DBEst	1545755
R89225	DBEst	954052
W93024	DBEst	1422175
AA447553	DBEst	2161223
N30372	DBEst	1148892
W60057	DBEst	1366816
AA676404	DBEst	2656926
W93382	DBEst	1422504
AA448271	DBEst	2161941
R77293	DBEst	851925
AA443637	DBEst	2156312
R72434	DBEst	846466
AA454160	DBEst	2167829
R95962	DBEst	981622
AA058711	DBEst	1551519
AA454562	DBEst	2177338
AA436187	DBEst	2141101
AA007283	DBEst	1463317

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA055979	DBEst	1548345
AA496539	DBEst	2229860
H24308	DBEst	893003
N64014	DBEst	1211843
H07934	DBEst	872756
R56251	DBEst	826357
H09076	DBEst	873898
H19227	DBEst	885467
H15089	DBEst	879909
AA416759	DBEst	2077713
AA430367	DBEst	2110942
H08720	DBEst	873542
H15685	DBEst	880505
AA626698	DBEst	2539085
H09325	DBEst	874147
AA046525	DBEst	1524628
H09322	DBEst	874144
T54121	DBEst	655982
H08730	DBEst	873552
R42823	DBEst	819734
W69954	DBEst	1379214
H29590	DBEst	900500
AA292074	DBEst	1940060
AA187148	DBEst	1775265
H12081	DBEst	876901
H08568	DBEst	873390
AA461174	DBEst	2186294
W72293	DBEst	1382896
T61116	DBEst	664153
AA598945	DBEst	2432617
AA488432	DBEst	2215863
R56234	DBEst	826340
AA486281	DBEst	2216497
T49633	DBEst	651493
AA487488	DBEst	2217652
T52700	DBEst	654560
R44173	DBEst	822037
T55197	DBEst	657058
T63520	DBEst	667385
R44163	DBEst	822027
T56013	DBEst	657874
N64617	DBEst	1212446
R43168	DBEst	825394
R37026	DBEst	794482
AA029597	DBEst	1497001
N31808	DBEst	1152207
N35922	DBEst	1157064
N89973	DBEst	1443300
H97868	DBEst	1118753
AA457108	DBEst	2179828
N75569	DBEst	1238147
H91245	DBEst	1081675
AA485357	DBEst	2214576
AA431435	DBEst	2115143
AA429367	DBEst	2112140
AA039851	DBEst	1516129

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
N34494	DBEst	1155636
H79319	DBEst	1057408
W42587	DBEst	1327057
AA670107	DBEst	2631606
H94474	DBEst	1102107
AA629692	DBEst	2552303
R75639	DBEst	850321
AA055946	DBEst	1548285
AA010222	DBEst	1471249
W74337	DBEst	1384486
AA009840	DBEst	1470887
AA699926	DBEst	2702889
H87153	DBEst	1068732
AA434187	DBEst	2139101
AA032221	DBEst	1502183
AA074511	DBEst	1614398
N35250	DBEst	1156392
N32281	DBEst	1152680
W93379	DBEst	1422501
W56753	DBEst	1358619
AA157017	DBEst	1728633
R98003	DBEst	983663
N63768	DBEst	1211597
AA485731	DBEst	2214950
AA150487	DBEst	1722001
R48320	DBEst	810346
R44357	DBEst	820653
R39528	DBEst	796984
AA485427	DBEst	2214646
AA621535	DBEst	2525474
R56055	DBEst	826161
AA056013	DBEst	1548352
T55407	DBEst	657268
H11938	DBEst	876758
R38635	DBEst	796091
AA668726	DBEst	2630225
T55704	DBEst	657565
W69906	DBEst	1379374
R44496	DBEst	823886
AA610066	DBEst	2458494
R52682	DBEst	814584
T56007	DBEst	657868
AA634028	DBEst	2557242
R38652	DBEst	796108
H90431	DBEst	1080861
R44048	DBEst	821916
H19415	DBEst	888110
W93370	DBEst	1422492
AA699573	DBEst	2703720
AA055350	DBEst	1547688
H98694	DBEst	1123362
H88540	DBEst	1070800
H16761	DBEst	883001
AA598781	DBEst	2432453
H08753	DBEst	873575
AA088258	DBEst	1633761

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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T52531	DBEst	654391
H29215	DBEst	900125
R94175	DBEst	969570
H18428	DBEst	884668
T57848	DBEst	659709
AA412738	DBEst	2070345
AA496887	DBEst	2230208
H10403	DBEst	875225
AA088458	DBEst	1633979
T58648	DBEst	660485
H29257	DBEst	900167
H85476	DBEst	1064498
AA111979	DBEst	1664066
AA004868	DBEst	1447685
AA165410	DBEst	1741469
AA007502	DBEst	1463488
AA130351	DBEst	1691494
H09143	DBEst	873965
W79834	DBEst	1390242
W85890	DBEst	1398319
H58000	DBEst	1010832
N58473	DBEst	1202363
N45301	DBEst	1186467
AA004846	DBEst	1447683
N54793	DBEst	1196113
AA010128	DBEst	1471156
AA056734	DBEst	1549100
AA022496	DBEst	1486587
W93688	DBEst	1422810
N50797	DBEst	1191963
H40351	DBEst	916403
N46096	DBEst	1187262
N46321	DBEst	1187487
N58022	DBEst	1201912
R06123	DBEst	756743
N64426	DBEst	1212255
R06706	DBEst	757326
AA447593	DBEst	2161263
N53378	DBEst	1194544
H60560	DBEst	1013392
AA056580	DBEst	1548920
H60824	DBEst	1013656
N92764	DBEst	1265073
AA496360	DBEst	2229681
N62464	DBEst	1210293
R38640	DBEst	796096
AA001897	DBEst	1445282
T96107	DBEst	734731
AA703141	DBEst	2706254
N50854	DBEst	1192020
N74623	DBEst	1231908
W92134	DBEst	1424645
AA454172	DBEst	2167841
AA459674	DBEst	2184581
AA005153	DBEst	1447808

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA460006	DBEst	2184890
H68286	DBEst	1027026
AA004528	DBEst	1448105
N39542	DBEst	1162749
AA037810	DBEst	1512928
AA151245	DBEst	1719436
AA419251	DBEst	2078964
AA457688	DBEst	2180408
R72097	DBEst	846129
AA454012	DBEst	2167681
AA464518	DBEst	2189402
N63988	DBEst	1211817
H18953	DBEst	885193
AA157499	DBEst	1729106
AA427891	DBEst	2111671
N32514	DBEst	1152913
AA025275	DBEst	1489475
H18472	DBEst	884712
H11036	DBEst	875856
R45939	DBEst	824272
AA284954	DBEst	1927635
H29566	DBEst	900476
R43352	DBEst	801576
AA446462	DBEst	2159127
T87235	DBEst	715587
H29500	DBEst	900410
AA664389	DBEst	2618380
H17800	DBEst	884040
H18936	DBEst	885176
R44193	DBEst	822057
N90783	DBEst	1444110
AA680136	DBEst	2656603
R43486	DBEst	820004
N62244	DBEst	1210073
AA700556	DBEst	2703519
H17055	DBEst	883295
H15087	DBEst	879907
H23212	DBEst	891907
R39066	DBEst	796522
H91691	DBEst	1087269
T52330	DBEst	654190
AA129171	DBEst	1688955
R56397	DBEst	826503
R43896	DBEst	821774
AA620556	DBEst	2524495
T68113	DBEst	679261
H08203	DBEst	873025
R38369	DBEst	795825
R41730	DBEst	817437
AA400229	DBEst	2054243
H10939	DBEst	875759
AA460353	DBEst	2185566
AA608567	DBEst	2456995
R20547	DBEst	820487
H18927	DBEst	885167
W74646	DBEst	1384859

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
R12808	DBEst	765884
N50079	DBEst	1191245
AA487115	DBEst	2217279
H09757	DBEst	874579
AA600214	DBEst	2433839
R43543	DBEst	821472
H18424	DBEst	884664
AA453616	DBEst	2167285
N53421	DBEst	1194587
W15542	DBEst	1289943
AA457119	DBEst	2179839
R02329	DBEst	752065
N91589	DBEst	1444916
N33555	DBEst	1153954
W84774	DBEst	1395894
AA131530	DBEst	1693081
T95650	DBEst	734274
N92404	DBEst	1264713
AA007370	DBEst	1463374
T83864	DBEst	712152
N49577	DBEst	1190743
W67292	DBEst	1376306
W37447	DBEst	1319061
AA004796	DBEst	1448293
N36172	DBEst	1157314
N26714	DBEst	1141062
T95909	DBEst	734533
W02102	DBEst	1274102
W72666	DBEst	1382486
H98201	DBEst	1119086
AA055052	DBEst	1547391
AA669545	DBEst	2631044
N39572	DBEst	1162779
N36994	DBEst	1158136
AA022561	DBEst	1486668
N72307	DBEst	1229411
N62487	DBEst	1210316
W63785	DBEst	1371386
AA700604	DBEst	2703567
N26906	DBEst	1141254
R62384	DBEst	834263
N49276	DBEst	1190442
H46254	DBEst	922306
N46240	DBEst	1187406
W86423	DBEst	1400190
AA149226	DBEst	1719661
R15785	DBEst	768200
AA009484	DBEst	1470839
AA040387	DBEst	1516683
N32199	DBEst	1152598
W72803	DBEst	1382916
AA151480	DBEst	1719985
AA454689	DBEst	2177465
AA055163	DBEst	1547520
AA404337	DBEst	2059062
AA113881	DBEst	1667766

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
T97710	DBEst	747055
R43088	DBEst	820149
R59200	DBEst	829895
AA019320	DBEst	1482731
T57834	DBEst	659695
H09243	DBEst	874065
T57349	DBEst	659210
R46202	DBEst	805599
T57221	DBEst	659082
T95113	DBEst	733737
R43646	DBEst	821563
AA400262	DBEst	2054142
R38089	DBEst	795545
AA007699	DBEst	1463691
H09769	DBEst	874591
AA634006	DBEst	2557220
R56148	DBEst	826254
AA156461	DBEst	1728086
R38274	DBEst	795730
T96688	DBEst	735312
AA629558	DBEst	2552169
R33031	DBEst	788874
H10079	DBEst	874901
AA678280	DBEst	2658802
T58129	DBEst	659990
N94820	DBEst	1267315
R39555	DBEst	797011
AA041300	DBEst	1517517
R54797	DBEst	819382
AA402812	DBEst	2056675
AA052960	DBEst	1543960
AA088430	DBEst	1633950
H09664	DBEst	874486
R43456	DBEst	819974
R53980	DBEst	815882
R43678	DBEst	802402
H10661	DBEst	875483
AA608555	DBEst	2456983
AA191488	DBEst	1780150
AA460366	DBEst	2185579
R45284	DBEst	821684
H11016	DBEst	875836
AA487896	DBEst	2215327
R53446	DBEst	815348
AA489813	DBEst	2220697
R59556	DBEst	830251
AA034059	DBEst	1505868
W35416	DBEst	1317362
R56123	DBEst	826229
R39546	DBEst	797002
W72881	DBEst	1383094
T50995	DBEst	652855
AA489847	DBEst	2220722
R38381	DBEst	795837
AA429573	DBEst	2112813
AA458473	DBEst	2183380

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
R42695	DBEst	819640
R54109	DBEst	816011
R23735	DBEst	778623
AA489768	DBEst	2220652
R38018	DBEst	795474
W15487	DBEst	1289868
AA454682	DBEst	2177458
AA486410	DBEst	2216574
R06746	DBEst	757366
AA448285	DBEst	2161955
R87122	DBEst	945935
R07128	DBEst	759051
R89104	DBEst	953931
R89828	DBEst	954655
R21408	DBEst	776189
AA013260	DBEst	1474307
AA053815	DBEst	1544750
N62213	DBEst	1210042
AA146969	DBEst	1716384
W90764	DBEst	1406730
N73705	DBEst	1230990
AA453495	DBEst	2167164
AA005428	DBEst	1448519
H77729	DBEst	1055818
AA485377	DBEst	2214596
N91165	DBEst	1444492
AA406020	DBEst	2064003
AA039512	DBEst	1516002
R53935	DBEst	815837
N59150	DBEst	1203040
AA157813	DBEst	1732642
AA074596	DBEst	1614483
AA419177	DBEst	2078924
AA464963	DBEst	2189847
W86199	DBEst	1398749
W90760	DBEst	1406726
W73790	DBEst	1383953
AA464694	DBEst	2189578
AA459681	DBEst	2184588
W84667	DBEst	1395847
AA135868	DBEst	1697100
AA150263	DBEst	1721784
AA102068	DBEst	1645927
AA040265	DBEst	1516670
W32511	DBEst	1313501
H70887	DBEst	1042703
AA010600	DBEst	1471626
AA459401	DBEst	2184308
AA045658	DBEst	1525589
R94491	DBEst	969886
AA150777	DBEst	1722288
AA448003	DBEst	2161673
AA005140	DBEst	1448643
N70208	DBEst	1226788
AA629909	DBEst	2552520
AA071486	DBEst	1578857

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
R56044	DBEst	826150
H09818	DBEst	874640
AA629262	DBEst	2541649
H09099	DBEst	873921
R44082	DBEst	821950
H10995	DBEst	875815
H10047	DBEst	874869
H08582	DBEst	873404
H09959	DBEst	874781
H09078	DBEst	873900
AA678335	DBEst	2658857
AA036881	DBEst	1509973
H17620	DBEst	883860
H23229	DBEst	891924
H86554	DBEst	1068133
H09082	DBEst	873904
AA670430	DBEst	2631929
H11728	DBEst	876548
AA682293	DBEst	2669610
H15408	DBEst	880228
R20639	DBEst	775420
AA419229	DBEst	2078959
H16733	DBEst	882973
R44078	DBEst	821946
AA629603	DBEst	2552214
H28734	DBEst	899688
R37108	DBEst	794564
AA421218	DBEst	2100043
R54105	DBEst	816007
R37696	DBEst	795152
H72030	DBEst	1043846
R44214	DBEst	822077
H23529	DBEst	892224
H09164	DBEst	873986
N69091	DBEst	1225252
AA173926	DBEst	1754058
H18934	DBEst	885174
AA599085	DBEst	2432710
AA486780	DBEst	2216944
N46354	DBEst	1187520
AA431887	DBEst	2115595
H20747	DBEst	889442
H23225	DBEst	891920
T64919	DBEst	673964
AA164847	DBEst	1741141
H39221	DBEst	908720
AA496878	DBEst	2230199
N30792	DBEst	1149312
W90660	DBEst	1406636
N29356	DBEst	1147876
N95011	DBEst	1267293
N92895	DBEst	1265204
N30308	DBEst	1148828
AA004321	DBEst	1447956
T96309	DBEst	734933
AA005355	DBEst	1448388

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA004353	DBEst	1447967
N35025	DBEst	1156167
W90067	DBEst	1406077
N32623	DBEst	1153022
AA459389	DBEst	2184296
N67832	DBEst	1219957
T88816	DBEst	717329
AA148524	DBEst	1721742
N30069	DBEst	1148589
R86242	DBEst	944648
W72692	DBEst	1382512
H92965	DBEst	1099293
R32334	DBEst	788177
R91570	DBEst	959110
H92974	DBEst	1099302
N51357	DBEst	1192523
H93050	DBEst	1099378
N52554	DBEst	1193720
AA011383	DBEst	1472409
N92924	DBEst	1265233
N36174	DBEst	1157316
AA448270	DBEst	2161940
N92502	DBEst	1264811
N57577	DBEst	1201467
AA476285	DBEst	2204496
H61758	DBEst	1014590
W04713	DBEst	1277433
N25240	DBEst	1139390
AA454218	DBEst	2167887
N62096	DBEst	1209909
AA457153	DBEst	2179873
W90705	DBEst	1406651
N93438	DBEst	1265747
W78169	DBEst	1388703
AA459296	DBEst	2184203
N93455	DBEst	1265764
N66025	DBEst	1218150
W86518	DBEst	1400375
AA669750	DBEst	2631249
H12338	DBEst	877158
AA047478	DBEst	1525653
AA055486	DBEst	1547825
H24350	DBEst	893045
H15718	DBEst	880538
R38349	DBEst	795805
N66053	DBEst	1218178
N91921	DBEst	1264230
R38364	DBEst	795820
AA425934	DBEst	2107722
T59016	DBEst	660853
R42433	DBEst	817198
R44754	DBEst	824132
H29521	DBEst	900431
N47443	DBEst	1188609
AA434139	DBEst	2139053

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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H54417	DBEst	994564
R42813	DBEst	801037
T72535	DBEst	689210
T60061	DBEst	661898
AA402891	DBEst	2056788
R43867	DBEst	821745
R54193	DBEst	816095
R00046	DBEst	749782
AA401397	DBEst	2053605
AA457543	DBEst	2180263
H28985	DBEst	899895
N70520	DBEst	1227100
R37615	DBEst	795071
H15533	DBEst	880353
W57872	DBEst	1364654
AA419143	DBEst	2078941
AA457485	DBEst	2180205
AA191019	DBEst	1779611
H09790	DBEst	874612
AA134985	DBEst	1696104
R43319	DBEst	821426
AA669674	DBEst	2631173
AA195463	DBEst	1785176
H16793	DBEst	883033
AA186327	DBEst	1774445
R38944	DBEst	796400
H16795	DBEst	883035
R54822	DBEst	819407
AA629987	DBEst	2552598
H16832	DBEst	883072
AA599140	DBEst	2432765
R56130	DBEst	826236
R17747	DBEst	771357
H17308	DBEst	883548
N90281	DBEst	1443608
N24024	DBEst	1138174
R39926	DBEst	797542
H17634	DBEst	883874
R20755	DBEst	775536
AA053411	DBEst	1544048
AA113291	DBEst	1664996
AA417307	DBEst	2077415
R37410	DBEst	794866
AA169372	DBEst	1748312
AA164819	DBEst	1740980
R56898	DBEst	827004
T49355	DBEst	651215
R92011	DBEst	959551
N33063	DBEst	1153462
R08184	DBEst	760107
N32295	DBEst	1152694
W88497	DBEst	1404009
R92446	DBEst	959986
N92415	DBEst	1264724
W80635	DBEst	1391652

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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N50904	DBEst	1192070
N63034	DBEst	1210863
AA005254	DBEst	1448756
H65834	DBEst	1024574
N62946	DBEst	1210775
N92947	DBEst	1265256
W92798	DBEst	1421951
AA135886	DBEst	1696860
R23727	DBEst	778615
AA447522	DBEst	2161192
H57306	DBEst	1010138
AA485432	DBEst	2214651
AA453474	DBEst	2167143
AA496630	DBEst	2229951
AA454610	DBEst	2177386
N53512	DBEst	1194678
AA453588	DBEst	2167257
R74478	DBEst	848848
AA136060	DBEst	1697270
AA044814	DBEst	1523017
W85927	DBEst	1398516
AA069372	DBEst	1576730
AA025434	DBEst	1490916
AA455528	DBEst	2178304
N69393	DBEst	1225554
W74602	DBEst	1384884
AA454022	DBEst	2167691
AA453470	DBEst	2167139
W84790	DBEst	1395910
N38787	DBEst	1161994
R98487	DBEst	985004
W47179	DBEst	1332046
AA035144	DBEst	1507314
AA127741	DBEst	1687030
R80235	DBEst	856516
R99849	DBEst	986450
AA018457	DBEst	1481712
W86860	DBEst	1400589
R55367	DBEst	824662
H29620	DBEst	900530
H29771	DBEst	900681
R42685	DBEst	819630
AA055835	DBEst	1548237
H16790	DBEst	883030
H10417	DBEst	875239
H23213	DBEst	891908
R70505	DBEst	844022
N62394	DBEst	1210223
H16743	DBEst	882983
R39098	DBEst	796554
AA644088	DBEst	2569306
W73474	DBEst	1383606
R44607	DBEst	823995
R73570	DBEst	847602
AA485442	DBEst	2214661

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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H17551	DBEst	883791
R44707	DBEst	824086
AA679278	DBEst	2659800
H11012	DBEst	875832
H17051	DBEst	883291
R52641	DBEst	814543
H09774	DBEst	874596
AA630800	DBEst	2553411
H09086	DBEst	873908
T40640	DBEst	648246
AA160498	DBEst	1735865
R38865	DBEst	796321
H17139	DBEst	883379
H29211	DBEst	900121
AA187938	DBEst	1774130
AA486418	DBEst	2216582
AA464935	DBEst	2189819
AA428239	DBEst	2111858
H24323	DBEst	893018
AA487462	DBEst	2217626
T54474	DBEst	656335
AA457235	DBEst	2179955
AA421273	DBEst	2100098
AA488332	DBEst	2215763
T48767	DBEst	650627
R15784	DBEst	768199
AA404273	DBEst	2058997
R43286	DBEst	821393
AA130596	DBEst	1692018
AA486092	DBEst	2216308
AA608560	DBEst	2456988
R20650	DBEst	775431
N62737	DBEst	1210566
N89753	DBEst	1443080
AA457723	DBEst	2180443
R02173	DBEst	751909
AA007522	DBEst	1463498
N71792	DBEst	1228504
W86195	DBEst	1398745
N26663	DBEst	1141011
W86387	DBEst	1398844
N67678	DBEst	1219803
AA455286	DBEst	2178062
N69044	DBEst	1225205
W92041	DBEst	1424425
N30316	DBEst	1148836
AA464744	DBEst	2189628
AA086471	DBEst	1629088
N68864	DBEst	1225025
AA464952	DBEst	2189836
AA055242	DBEst	1547598
H98255	DBEst	1119140
N54395	DBEst	1195715
AA444051	DBEst	2156726
N77828	DBEst	1240529

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA047190	DBEst	1525090
N27829	DBEst	1142310
W52190	DBEst	1349351
AA443121	DBEst	2155796
AA481745	DBEst	2211297
AA041254	DBEst	1517488
N66139	DBEst	1218264
N51499	DBEst	1192665
W90748	DBEst	1406714
AA002091	DBEst	1445707
N75473	DBEst	1238051
AA427715	DBEst	2112175
W86282	DBEst	1398720
N47717	DBEst	1188883
W49494	DBEst	1337942
AA644234	DBEst	2569452
AA176957	DBEst	1758115
T72562	DBEst	689237
AA458838	DBEst	2183745
R15794	DBEst	768209
W56771	DBEst	1358637
AA677083	DBEst	2657605
R97710	DBEst	983370
AA629686	DBEst	2552297
T40541	DBEst	648161
H50114	DBEst	989955
H18950	DBEst	885190
R38878	DBEst	796334
AA131238	DBEst	1692765
H09616	DBEst	874438
AA683520	DBEst	2670118
H24020	DBEst	892715
AA419088	DBEst	2078816
H10709	DBEst	875560
H10228	DBEst	875050
AA056465	DBEst	1548805
H08796	DBEst	873618
R39804	DBEst	797260
H20826	DBEst	889521
AA053962	DBEst	1544888
R55809	DBEst	825884
AA487895	DBEst	2215326
R41972	DBEst	817667
R56045	DBEst	826151
R20670	DBEst	775451
AA101155	DBEst	1647922
H11895	DBEst	876715
AA158244	DBEst	1733039
H23524	DBEst	892219
AA190634	DBEst	1779747
AA505003	DBEst	2241163
AA400013	DBEst	2053754
R56134	DBEst	826240
AA121158	DBEst	1678701
H23230	DBEst	891925

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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H29265	DBEst	900175
H29538	DBEst	900448
AA496139	DBEst	2229460
H29285	DBEst	900195
N40554	DBEst	1164151
H10045	DBEst	874867
R44477	DBEst	823867
AA488341	DBEst	2215772
R38179	DBEst	795635
R58953	DBEst	829648
AA778675	DBEst	2838006
R43822	DBEst	821702
N26740	DBEst	1141088
H17024	DBEst	883264
H19343	DBEst	885583
W37808	DBEst	1319412
R44265	DBEst	820623
T49557	DBEst	651417
AA005329	DBEst	1447881
H67707	DBEst	1026447
N63628	DBEst	1211457
AA150417	DBEst	1721930
N64464	DBEst	1212293
H66708	DBEst	1025448
N64532	DBEst	1212361
R12386	DBEst	765462
N51291	DBEst	1192457
W56597	DBEst	1358522
AA025930	DBEst	1491429
N50845	DBEst	1192011
AA461529	DBEst	2185393
W67228	DBEst	1376097
H68938	DBEst	1030107
N66607	DBEst	1218732
R93401	DBEst	967567
W95480	DBEst	1425387
AA001604	DBEst	1445301
N50056	DBEst	1191222
AA001841	DBEst	1445655
N57551	DBEst	1201441
H82872	DBEst	1061542
AA701914	DBEst	2705027
R89317	DBEst	954144
AA011096	DBEst	1472124
H53703	DBEst	993850
AA458498	DBEst	2183405
AA152183	DBEst	1721235
W04674	DBEst	1277462
AA459658	DBEst	2184565
AA699361	DBEst	2702555
AA099386	DBEst	1645493
H95362	DBEst	1102995
N63260	DBEst	1211089
AA147641	DBEst	1717012
R01094	DBEst	750830

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA150198	DBEst	1721709
W47552	DBEst	1332221
AA128008	DBEst	1687288
AA005108	DBEst	1448897
AA630094	DBEst	2552705
H58250	DBEst	1011082
N67487	DBEst	1219612
AA136052	DBEst	1697262
AA156793	DBEst	1728408
AA459937	DBEst	2184821
AA127017	DBEst	1687646
AA457700	DBEst	2180420
AA128017	DBEst	1687297
AA427621	DBEst	2111454
N92478	DBEst	1264787
AA427522	DBEst	2112262
H52379	DBEst	992220
AA630604	DBEst	2553215
AA152299	DBEst	1721499
AA155913	DBEst	1727531
AA131469	DBEst	1693092
R78521	DBEst	854802
T40725	DBEst	648320
H10030	DBEst	874852
H18956	DBEst	885196
H07920	DBEst	872742
T40927	DBEst	648510
H18017	DBEst	884257
AA699427	DBEst	2702621
H10012	DBEst	874834
R70685	DBEst	844202
N48355	DBEst	1189521
T71991	DBEst	686512
AA291484	DBEst	1939505
R44949	DBEst	824303
AA134871	DBEst	1695334
H22854	DBEst	891549
R37411	DBEst	794867
T61269	DBEst	664306
AA663981	DBEst	2617972
H08194	DBEst	873016
AA668959	DBEst	2630458
T61792	DBEst	665035
R44985	DBEst	824339
T58775	DBEst	660612
AA663986	DBEst	2617977
H10641	DBEst	875463
AA634109	DBEst	2557323
T68440	DBEst	679588
R42922	DBEst	819829
N93505	DBEst	1265814
AA626028	DBEst	2538415
N92901	DBEst	1265210
H11088	DBEst	875908
R54590	DBEst	816492
W72051	DBEst	1382321

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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H15427	DBEst	880247
T62854	DBEst	666511
H17325	DBEst	883565
AA421819	DBEst	2100635
AA479795	DBEst	2205681
AA676453	DBEst	2656975
R43595	DBEst	821515
T68445	DBEst	679593
T74257	DBEst	690932
R37620	DBEst	795076
AA481769	DBEst	2211321
H10372	DBEst	875194
T49652	DBEst	651512
AA428182	DBEst	2111832
AA488391	DBEst	2215822
AA489324	DBEst	2218926
AA055656	DBEst	1547995
H15677	DBEst	880497
AA460722	DBEst	2185842
R38196	DBEst	795652
H10679	DBEst	875501
H73640	DBEst	1046508
AA460848	DBEst	2185968
AA156597	DBEst	1728342
AA598468	DBEst	2432051
R38543	DBEst	795999
H29783	DBEst	900693
AA179600	DBEst	1760986
AA457566	DBEst	2180286
R38613	DBEst	796069
AA416684	DBEst	2077689
R34297	DBEst	790155
R39179	DBEst	796635
R56870	DBEst	826976
H10072	DBEst	874894
AA421266	DBEst	2100091
H17463	DBEst	883703
N67366	DBEst	1219491
W04509	DBEst	1277288
N70756	DBEst	1227336
N93967	DBEst	1266276
AA446865	DBEst	2159530
H97366	DBEst	1118235
AA065042	DBEst	1558691
N32072	DBEst	1152471
AA053165	DBEst	1544374
N94488	DBEst	1266797
N32847	DBEst	1153246
W37683	DBEst	1319297
AA169202	DBEst	1748184
R08548	DBEst	768779
AA055404	DBEst	1547943
H98967	DBEst	1123635
N72113	DBEst	1229217
N75055	DBEst	1237633

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA425214	DBEst	2106122
N95490	DBEst	1267829
N70837	DBEst	1227417
N67305	DBEst	1219430
AA086005	DBEst	1629572
N80764	DBEst	1243465
AA608531	DBEst	2456959
AA400492	DBEst	2054363
N93197	DBEst	1265506
N95073	DBEst	1267362
AA404286	DBEst	2059010
AA088438	DBEst	1633933
AA443698	DBEst	2156373
AA191548	DBEst	1780211
AA400422	DBEst	2054293
AA487934	DBEst	2215365
AA101876	DBEst	1645279
AA437094	DBEst	2142008
AA040389	DBEst	1516685
AA284112	DBEst	1928589
H93318	DBEst	1099646
AA406048	DBEst	2064157
AA461084	DBEst	2186204
W42996	DBEst	1327496
T83646	DBEst	711934
AA100595	DBEst	1646877
N69100	DBEst	1225261
AA609485	DBEst	2457913
R31933	DBEst	787776
H12105	DBEst	876925
AA609744	DBEst	2458172
T55340	DBEst	657201
AA453420	DBEst	2167089
H04795	DBEst	868347
AA609749	DBEst	2458177
AA609585	DBEst	2458013
R59580	DBEst	830275
N70203	DBEst	1226783
AA609599	DBEst	2458027
AA424950	DBEst	2107038
R45567	DBEst	823781
T55236	DBEst	657097
AA159356	DBEst	1734167
T55437	DBEst	657298
AA165116	DBEst	1740362
AA454668	DBEst	2177444
R45292	DBEst	822151
AA609628	DBEst	2458056
R46700	DBEst	822667
N71303	DBEst	1227883
AA195002	DBEst	1784704
R49144	DBEst	820212
AA169498	DBEst	1747904
AA609648	DBEst	2458076
R40208	DBEst	820854

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA169535	DBEst	1747976
AA609695	DBEst	2458123
AA194983	DBEst	1784685
R51504	DBEst	813406
R43521	DBEst	821450
AA417950	DBEst	2079769
AA417956	DBEst	2079775
N47312	DBEst	1188478
AA417982	DBEst	2079801
R51305	DBEst	813207
H04828	DBEst	868380
N31585	DBEst	1151984
AA888148	DBEst	3003823
H05089	DBEst	868641
AA450336	DBEst	2162881
H05939	DBEst	869491
AA449444	DBEst	2162835
AA410298	DBEst	2069259
R51836	DBEst	813738
AA418728	DBEst	2080529
H06154	DBEst	869706
R51871	DBEst	813773
AA878576	DBEst	2987541
AA418743	DBEst	2080544
W93106	DBEst	1422268
AA401376	DBEst	2053584
N47961	DBEst	1189127
W67193	DBEst	1376083
AA149051	DBEst	1719459
AA172188	DBEst	1751265
N48181	DBEst	1189347
W68266	DBEst	1377136
AA159600	DBEst	1741809
AA620458	DBEst	2524397
W69435	DBEst	1378697
AA136551	DBEst	1697761
W69774	DBEst	1379032
W94247	DBEst	1423388
AA457570	DBEst	2180290
AA150459	DBEst	1721990
H89293	DBEst	1071553
AA454016	DBEst	2167685
W46632	DBEst	1331260
N54783	DBEst	1196103
N71463	DBEst	1228175
N63696	DBEst	1211525
AA173430	DBEst	1753559
AA487241	DBEst	2217405
AA423978	DBEst	2102939
W60283	DBEst	1367042
AA158234	DBEst	1733029
AA024604	DBEst	1489509
AA598779	DBEst	2432451
AA181646	DBEst	1765113
AA160780	DBEst	1736147
AA436009	DBEst	2140923

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA159962	DBEst	1734453
AA425665	DBEst	2106385
AA187641	DBEst	1773895
AA453598	DBEst	2167267
W72749	DBEst	1382727
AA429804	DBEst	2113028
T99719	DBEst	749456
AA436456	DBEst	2141370
AA456975	DBEst	2179695
AA432121	DBEst	2114509
AA448637	DBEst	2162307
N23599	DBEst	1137749
R10099	DBEst	762055
R91949	DBEst	959489
AA608532	DBEst	2456960
N23867	DBEst	1138017
AA431736	DBEst	2115444
R06618	DBEst	757238
H06195	DBEst	869747
AA400710	DBEst	2054581
AA461486	DBEst	2185350
R45592	DBEst	823805
AA609364	DBEst	2457792
AA868929	DBEst	2964374
AA455933	DBEst	2178709
R42182	DBEst	820573
N24966	DBEst	1139116
AA454085	DBEst	2167754
AA455934	DBEst	2178710
N25578	DBEst	1139926
AA454854	DBEst	2177630
AA450020	DBEst	2163770
AA877618	DBEst	2986583
R41911	DBEst	817610
AA877845	DBEst	2986810
N71982	DBEst	1228694
AA453028	DBEst	2166697
AA877255	DBEst	2986332
AA877669	DBEst	2986634
R39325	DBEst	796781
N32604	DBEst	1153003
AA253464	DBEst	1885639
AA458648	DBEst	2183555
R42864	DBEst	819774
AA190871	DBEst	1779391
N39229	DBEst	1162436
AA454982	DBEst	2177758
AA236798	DBEst	1860818
R42871	DBEst	819781
N63575	DBEst	1211404
N72288	DBEst	1229392
N72300	DBEst	1229404
N98513	DBEst	1269938
AA191336	DBEst	1780158
AA190313	DBEst	1779023

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA599104	DBEst	2432729
AA486183	DBEst	2216399
N74958	DBEst	1237504
N34895	DBEst	1156037
W70342	DBEst	1379642
AA192435	DBEst	1781657
H75776	DBEst	1049788
AA621201	DBEst	2525140
AA176413	DBEst	1757597
AA406210	DBEst	2064191
AA481789	DBEst	2211341
H62011	DBEst	1014843
AA479928	DBEst	2204410
H65832	DBEst	1024572
AA481729	DBEst	2211281
H78999	DBEst	1057088
AA487527	DBEst	2217691
W90105	DBEst	1406095
H81083	DBEst	1059172
AA405690	DBEst	2063691
H70163	DBEst	1040369
AA489791	DBEst	2220675
AA489826	DBEst	2220710
W92738	DBEst	1421890
AA489840	DBEst	2220715
N47208	DBEst	1188374
AA490048	DBEst	2220923
H05091	DBEst	868643
AA169379	DBEst	1748319
AA406231	DBEst	2064373
N73477	DBEst	1230762
N73571	DBEst	1230856
R15832	DBEst	768247
N73807	DBEst	1231092
AA456289	DBEst	2179499
N48698	DBEst	1189864
R43017	DBEst	820079
N73846	DBEst	1231131
AA609861	DBEst	2458289
H96229	DBEst	1109371
AA447692	DBEst	2161362
R49645	DBEst	825175
N74042	DBEst	1231327
H06508	DBEst	870040
N76101	DBEst	1238679
AA219033	DBEst	1833125
AA398264	DBEst	2051373
R60170	DBEst	830865
R60328	DBEst	831023
AA878880	DBEst	2987845
AA449329	DBEst	2163178
AA410190	DBEst	2069286
R52347	DBEst	814249
AA757351	DBEst	2805214
AA844124	DBEst	2930575

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA398112	DBEst	2051221
R54444	DBEst	816346
AA449332	DBEst	2163181
H06525	DBEst	870057
R51361	DBEst	813263
H06377	DBEst	869929
AA855158	DBEst	2942696
H06385	DBEst	869937
AA844447	DBEst	2930898
R51186	DBEst	813088
H11968	DBEst	876788
H11987	DBEst	876807
R51631	DBEst	813533
H11760	DBEst	876580
AA418747	DBEst	2080639
AA449686	DBEst	2163436
AA397918	DBEst	2051259
H11631	DBEst	876451
AA890663	DBEst	3017542
N56888	DBEst	1200778
W70242	DBEst	1379511
W94363	DBEst	1423494
N62817	DBEst	1210646
W70264	DBEst	1379553
AA062985	DBEst	1557637
W94620	DBEst	1423742
N62969	DBEst	1210798
AA463206	DBEst	2188090
W95106	DBEst	1424224
AA486427	DBEst	2216591
AA160692	DBEst	1736258
AA425700	DBEst	2106420
AA425749	DBEst	2106451
AA453623	DBEst	2167292
AA102223	DBEst	1646451
AA160484	DBEst	1735912
AA127395	DBEst	1686772
H99704	DBEst	1124372
AA186460	DBEst	1774577
AA151775	DBEst	1720675
AA454595	DBEst	2177371
AA159605	DBEst	1741812
W45453	DBEst	1329593
AA486185	DBEst	2216401
AA428179	DBEst	2111829
AA443290	DBEst	2155965
T96986	DBEst	735610
R26531	DBEst	782666
AA195398	DBEst	1785170
AA166695	DBEst	1745159
N69962	DBEst	1226542
AA191437	DBEst	1780116
H89505	DBEst	1079983
N24829	DBEst	1138979
AA609422	DBEst	2457850
AA455012	DBEst	2177788

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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N24848	DBEst	1138998
N51682	DBEst	1192848
AA406363	DBEst	2064346
N25920	DBEst	1140268
AA459944	DBEst	2184828
AA406373	DBEst	2064356
AA417940	DBEst	2079759
AA194833	DBEst	1784523
AA406233	DBEst	2064375
N27366	DBEst	1141847
R43755	DBEst	823606
AA411656	DBEst	2069319
AA194941	DBEst	1784632
AA443719	DBEst	2156394
AA479106	DBEst	2207662
H06249	DBEst	869801
N29817	DBEst	1148337
AA424754	DBEst	2107479
AA621224	DBEst	2525163
AA452572	DBEst	2166241
AA876021	DBEst	2984862
AA443284	DBEst	2155959
N66104	DBEst	1218229
R44741	DBEst	824119
R44762	DBEst	824140
AA452801	DBEst	2166470
AA256176	DBEst	1891715
R43008	DBEst	820070
AA452816	DBEst	2166485
AA452822	DBEst	2166491
R43020	DBEst	820082
AA402915	DBEst	2056651
AA425664	DBEst	2106439
AA452824	DBEst	2166493
AA456093	DBEst	2178869
AA452877	DBEst	2166546
W51794	DBEst	1349845
AA456635	DBEst	2179211
AA773894	DBEst	2825465
W72140	DBEst	1382607
AA676466	DBEst	2656988
AA773983	DBEst	2825872
R44396	DBEst	820692
AA489383	DBEst	2218985
AA149117	DBEst	1719614
W04695	DBEst	1277415
AA152340	DBEst	1719174
W16425	DBEst	1289599
N34933	DBEst	1156075
N76133	DBEst	1238711
W20462	DBEst	1295061
T92200	DBEst	724113
N78889	DBEst	1241590
AA196281	DBEst	1791845
AA009738	DBEst	1470541

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA005135	DBEst	1448638
AA487192	DBEst	2217356
N23885	DBEst	1138035
AA132524	DBEst	1694031
AA406061	DBEst	2064044
AA490058	DBEst	2220933
N51030	DBEst	1192196
AA120881	DBEst	1678212
AA044741	DBEst	1522944
AA012911	DBEst	1473938
N53458	DBEst	1194624
AA013353	DBEst	1474459
AA121271	DBEst	1678904
AA122079	DBEst	1678117
AA485896	DBEst	2215115
AA121518	DBEst	1679132
N57659	DBEst	1201549
AA045300	DBEst	1523502
AA146979	DBEst	1716474
AA460376	DBEst	2185589
AA161161	DBEst	1735398
AA487233	DBEst	2217397
AA464522	DBEst	2189406
AA126958	DBEst	1686410
AA455483	DBEst	2178259
H64591	DBEst	1023331
N25650	DBEst	1139998
AA424586	DBEst	2103556
R42312	DBEst	825251
AA459983	DBEst	2184867
AA609955	DBEst	2458383
N90595	DBEst	1443922
AA452125	DBEst	2165794
H05535	DBEst	869087
R49597	DBEst	825128
N92804	DBEst	1265113
R43026	DBEst	820088
N94447	DBEst	1266756
AA610016	DBEst	2458444
T96935	DBEst	735559
N98238	DBEst	1269633
T99043	DBEst	748780
R40835	DBEst	821193
AA398141	DBEst	2051250
AA884897	DBEst	2994878
AA406311	DBEst	2064295
R66438	DBEst	839076
AA406201	DBEst	2064309
AA406320	DBEst	2064321
AA844818	DBEst	2931269
AA844831	DBEst	2931282
AA411204	DBEst	2068754
AA844864	DBEst	2931315
AA449362	DBEst	2163211
AA411607	DBEst	2068751

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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H16098	DBEst	880918
R59608	DBEst	830303
AA449490	DBEst	2163240
H16179	DBEst	880999
AA424944	DBEst	2107032
H16725	DBEst	882965
AA777551	DBEst	2837030
AA132867	DBEst	1694418
W92315	DBEst	1424680
AA487846	DBEst	2215277
W72870	DBEst	1383035
AA129217	DBEst	1689086
AA598640	DBEst	2432223
W72920	DBEst	1383055
N51585	DBEst	1192751
AA487297	DBEst	2217461
AA432096	DBEst	2115804
AA469964	DBEst	2197273
N63516	DBEst	1211345
N50702	DBEst	1191868
W73597	DBEst	1383731
AA002226	DBEst	1445161
N73083	DBEst	1230187
T98355	DBEst	748092
AA429807	DBEst	2113031
T99243	DBEst	748980
AA426026	DBEst	2106559
AA458674	DBEst	2183581
H90407	DBEst	1080837
N27637	DBEst	1142118
AA459403	DBEst	2184310
AA167565	DBEst	1745958
AA459649	DBEst	2184556
AA167589	DBEst	1746000
AA459689	DBEst	2184596
AA133554	DBEst	1690524
AA169173	DBEst	1747749
AA047275	DBEst	1525174
R06754	DBEst	757374
W81524	DBEst	1392624
AA004803	DBEst	1448300
AA459851	DBEst	2184758
AA218673	DBEst	1832757
AA621183	DBEst	2525122
AA219047	DBEst	1833139
N34042	DBEst	1154442
R93409	DBEst	967575
AA219230	DBEst	1833304
N30557	DBEst	1149077
N52876	DBEst	1194042
AA621294	DBEst	2525233
AA195318	DBEst	1785009
AA454654	DBEst	2177430
AA453494	DBEst	2167163
AA478596	DBEst	2207230

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA411685	DBEst	2069348
AA194993	DBEst	1784695
N52938	DBEst	1194104
R96522	DBEst	982182
R45517	DBEst	823731
N33610	DBEst	1154009
AA454616	DBEst	2177392
AA419603	DBEst	2079357
AA455130	DBEst	2177906
AA195080	DBEst	1784770
N54061	DBEst	1195227
AA478717	DBEst	2207351
AA412417	DBEst	2071023
AA457576	DBEst	2180296
R44447	DBEst	823344
N54274	DBEst	1195440
R59473	DBEst	830168
AA449832	DBEst	2163582
AA256464	DBEst	1892002
AA187143	DBEst	1775260
R44409	DBEst	823307
AA456654	DBEst	2179230
AA449847	DBEst	2163597
AA181023	DBEst	1764497
R44428	DBEst	823326
AA598507	DBEst	2432090
W72310	DBEst	1382933
AA459949	DBEst	2184833
R45114	DBEst	823468
AA026605	DBEst	1492440
AA455882	DBEst	2178658
AA055440	DBEst	1547778
AA778392	DBEst	2837723
AA775616	DBEst	2834950
AA455980	DBEst	2178756
AA706301	DBEst	2716219
AA709143	DBEst	2719061
AA455994	DBEst	2178770
R43798	DBEst	823647
AA165313	DBEst	1740541
AA463249	DBEst	2188133
AA488646	DBEst	2216077
W31919	DBEst	1312930
AA432081	DBEst	2115789
AA608729	DBEst	2457157
AA128462	DBEst	1689571
AA120866	DBEst	1678197
AA447476	DBEst	2161146
AA173411	DBEst	1753540
T94556	DBEst	728044
N64145	DBEst	1211974
AA437099	DBEst	2142013
N35894	DBEst	1157036
AA151917	DBEst	1720790

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA435988	DBEst	2140902
AA443976	DBEst	2156651
AA056484	DBEst	1548887
AA485869	DBEst	2215088
AA485969	DBEst	2215120
AA053682	DBEst	1544609
AA598983	DBEst	2432023
AA488604	DBEst	2216035
T91098	DBEst	723011
AA488659	DBEst	2216090
AA129318	DBEst	1689101
AA172039	DBEst	1751096
R81831	DBEst	858434
AA412443	DBEst	2071013
AA460669	DBEst	2185789
AA487501	DBEst	2217665
AA128407	DBEst	1689705
AA486858	DBEst	2217022
R00130	DBEst	749866
AA609310	DBEst	2457738
W23441	DBEst	1300412
R06860	DBEst	757480
W32192	DBEst	1313379
R45579	DBEst	823793
W46575	DBEst	1331240
R08260	DBEst	760183
N25657	DBEst	1140005
R49650	DBEst	825180
N54925	DBEst	1196245
W56308	DBEst	1358197
AA621761	DBEst	2524189
H06157	DBEst	869709
N25338	DBEst	1139488
R27619	DBEst	783754
R42056	DBEst	819607
N40180	DBEst	1163725
R16983	DBEst	770593
R59355	DBEst	830050
W60473	DBEst	1367234
R21741	DBEst	776522
N63520	DBEst	1211349
AA620359	DBEst	2524298
T86932	DBEst	715284
W67536	DBEst	1376407
W67368	DBEst	1376449
AA620669	DBEst	2524608
R51514	DBEst	813416
AA449321	DBEst	2163170
N48050	DBEst	1189216
AA448653	DBEst	2162323
AA704255	DBEst	2714173
AA398365	DBEst	2051492
R61700	DBEst	832395

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA894557	DBEst	3030958
AA424534	DBEst	2103504
AA857131	DBEst	2945433
AA778919	DBEst	2838250
AA398267	DBEst	2051376
R61187	DBEst	831882
AA857101	DBEst	2945403
AA199666	DBEst	1795373
R61231	DBEst	831926
R61297	DBEst	831992
AA495835	DBEst	2229156
AA448855	DBEst	2162525
AA705112	DBEst	2715030
AA424562	DBEst	2103532
AA398285	DBEst	2051394
W72671	DBEst	1382491
AA001879	DBEst	1445264
N50740	DBEst	1191906
W74257	DBEst	1384505
AA598947	DBEst	2432619
W95636	DBEst	1425545
N51068	DBEst	1192234
W73994	DBEst	1384641
AA001924	DBEst	1445399
H69691	DBEst	1039897
N64198	DBEst	1212027
AA446661	DBEst	2159326
N23717	DBEst	1137867
AA004887	DBEst	1447704
AA491457	DBEst	2220630
AA169840	DBEst	1748438
AA143467	DBEst	1712855
AA219172	DBEst	1833400
H72232	DBEst	1044048
AA481788	DBEst	2211340
AA171760	DBEst	1750836
AA431210	DBEst	2114918
AA172056	DBEst	1751150
AA621291	DBEst	2525230
H72279	DBEst	1044095
AA460147	DBEst	2185532
W71994	DBEst	1382435
N62271	DBEst	1210100
AA174106	DBEst	1754248
AA431771	DBEst	2115479
N62712	DBEst	1210541
AA148862	DBEst	1719158
AA457517	DBEst	2180237
AA489463	DBEst	2219065
R40031	DBEst	820780
AA479952	DBEst	2208103
AA461317	DBEst	2186437
AA458993	DBEst	2183900
AA410345	DBEst	2069513

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA456318	DBEst	2179528
AA419608	DBEst	2079362
N38960	DBEst	1162167
N57483	DBEst	1201373
AA424511	DBEst	2103472
N39577	DBEst	1162784
AA195021	DBEst	1784723
AA399269	DBEst	2053004
N57906	DBEst	1201796
AA461090	DBEst	2186210
AA456001	DBEst	2178777
R83757	DBEst	928634
AA599311	DBEst	2432936
R45550	DBEst	823764
AA453779	DBEst	2167448
R45627	DBEst	823839
AA495836	DBEst	2229157
R45692	DBEst	822138
AA865729	DBEst	2958005
AA456036	DBEst	2178812
AA453802	DBEst	2167471
AA456044	DBEst	2178820
H70775	DBEst	1042591
AA188653	DBEst	1775678
N22897	DBEst	1137047
N78903	DBEst	1241604
W37733	DBEst	1319327
N68970	DBEst	1225131
AA487563	DBEst	2217727
AA190825	DBEst	1779210
N23651	DBEst	1137801
N73011	DBEst	1230115
W45025	DBEst	1329106
AA047462	DBEst	1525527
AA159994	DBEst	1734485
N49850	DBEst	1191016
W42746	DBEst	1327206
N89812	DBEst	1443139
N25049	DBEst	1139199
N68001	DBEst	1224162
AA131240	DBEst	1692767
AA598402	DBEst	2432286
AA412497	DBEst	2071067
AA487301	DBEst	2217465
R33363	DBEst	789221
AA131450	DBEst	1692956
AA133395	DBEst	1690363
AA056383	DBEst	1548723
AA598515	DBEst	2432098
W73781	DBEst	1383944
AA487505	DBEst	2217669
AA133590	DBEst	1690603
W45285	DBEst	1329387
R01179	DBEst	750915

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA158352	DBEst	1733163
AA446866	DBEst	2159531
H60999	DBEst	1013831
AA166743	DBEst	1745216
R61377	DBEst	832072
N68399	DBEst	1224560
W81229	DBEst	1392249
R68013	DBEst	841530
R99092	DBEst	985693
W86185	DBEst	1398625
AA156235	DBEst	1727853
R42143	DBEst	820534
H91680	DBEst	1087258
H06380	DBEst	869932
R91401	DBEst	958941
R00311	DBEst	750047
AA233070	DBEst	1856186
W93407	DBEst	1422549
W86992	DBEst	1400749
AA620783	DBEst	2524722
N93853	DBEst	1266162
AA620794	DBEst	2524733
AA436460	DBEst	2141374
R97240	DBEst	982900
R97970	DBEst	983630
N95041	DBEst	1267400
R60981	DBEst	831676
AA916728	DBEst	3056120
AA424675	DBEst	2103654
AA206914	DBEst	1802491
AA418402	DBEst	2080211
R61866	DBEst	832561
AA418392	DBEst	2080201
R61883	DBEst	832578
AA451863	DBEst	2165532
AA418408	DBEst	2080217
R61289	DBEst	831984
AA131315	DBEst	1692822
AA398341	DBEst	2051450
N51601	DBEst	1192767
AA007626	DBEst	1463612
AA148859	DBEst	1719155
W37424	DBEst	1319018
N52039	DBEst	1193205
H85434	DBEst	1064456
H84795	DBEst	1064077
N52337	DBEst	1193503
N64762	DBEst	1212591
AA010611	DBEst	1471637
N49717	DBEst	1190883
AA463221	DBEst	2188105
AA176506	DBEst	1757639
AA443695	DBEst	2156370
N56892	DBEst	1200782
AA179392	DBEst	1760761
AA464972	DBEst	2189856

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA434482	DBEst	2139396
N22033	DBEst	1128167
T95320	DBEst	733944
W15284	DBEst	1289674
AA443958	DBEst	2156633
AA191493	DBEst	1780173
AA435985	DBEst	2140899
N48593	DBEst	1189759
AA461091	DBEst	2186211
AA620697	DBEst	2524636
AA609463	DBEst	2457891
AA437124	DBEst	2142038
T98287	DBEst	748024
AA410383	DBEst	2069486
AA100674	DBEst	1647035
AA620995	DBEst	2524934
N57535	DBEst	1201425
AA488658	DBEst	2216089
AA620628	DBEst	2524567
AA193579	DBEst	1782980
AA417994	DBEst	2079813
AA621381	DBEst	2525320
AA479362	DBEst	2207918
N58276	DBEst	1202166
N40211	DBEst	1163756
AA608824	DBEst	2457252
N68578	DBEst	1224739
H77614	DBEst	1055703
AA478962	DBEst	2207596
AA453435	DBEst	2167104
AA452802	DBEst	2166471
R45970	DBEst	823213
AA865464	DBEst	2957740
R38505	DBEst	795961
R45976	DBEst	823218
AA455041	DBEst	2177817
AA425116	DBEst	2107186
AA872020	DBEst	2968058
AA701944	DBEst	2705057
AA864524	DBEst	2958837
R46000	DBEst	823239
AA873885	DBEst	2968021
R37467	DBEst	794923
AA497044	DBEst	2230365
AA702973	DBEst	2706086
R15922	DBEst	768337
AA703449	DBEst	2713367
AA167382	DBEst	1745759
N25085	DBEst	1139235
AA101954	DBEst	1645551
AA447480	DBEst	2161150
N90218	DBEst	1443545
W46341	DBEst	1330929
AA149987	DBEst	1721140
W47416	DBEst	1332213

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA455275	DBEst	2178051
W49487	DBEst	1337857
AA132172	DBEst	1693784
W37418	DBEst	1319012
N90704	DBEst	1444031
AA181767	DBEst	1765234
N26899	DBEst	1141247
N90774	DBEst	1444101
N49005	DBEst	1190171
AA609392	DBEst	2457820
AA191426	DBEst	1780105
AA486277	DBEst	2216493
AA416984	DBEst	2077110
H71242	DBEst	1043058
AA074079	DBEst	1613949
H72643	DBEst	1044459
AA132660	DBEst	1694211
AA164782	DBEst	1740943
R63714	DBEst	835593
AA159497	DBEst	1735040
AA417355	DBEst	2077437
R96198	DBEst	981858
AA401438	DBEst	2053646
W93544	DBEst	1422665
H78411	DBEst	1056500
AA064869	DBEst	1558990
AA461490	DBEst	2185354
AA481795	DBEst	2211347
R00835	DBEst	750571
AA136540	DBEst	1697814
AA417252	DBEst	2077351
T64896	DBEst	673941
R99471	DBEst	986072
W42450	DBEst	1326931
R42218	DBEst	817086
H63241	DBEst	1018042
H04789	DBEst	868341
H66122	DBEst	1024862
R61821	DBEst	832516
R45632	DBEst	823844
AA002258	DBEst	1445173
H81938	DBEst	1060027
H06282	DBEst	869834
H99362	DBEst	1124030
R60014	DBEst	830709
AA425056	DBEst	2107189
AA452118	DBEst	2165787
R60135	DBEst	830830
AA452130	DBEst	2165799
AA598594	DBEst	2432177
AA452134	DBEst	2165803
R60044	DBEst	830739
AA810225	DBEst	2879584
AA424920	DBEst	2107443
AA452250	DBEst	2165919

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA598625	DBEst	2432208
AA398355	DBEst	2051464
AA425543	DBEst	2107455
R61372	DBEst	832067
T90789	DBEst	722702
AA398430	DBEst	2051539
AA598679	DBEst	2432262
AA461318	DBEst	2186438
N53670	DBEst	1194836
AA460961	DBEst	2186081
W86445	DBEst	1400231
N62652	DBEst	1210481
AA055768	DBEst	1548168
AA100293	DBEst	1646584
AA609556	DBEst	2457984
N62434	DBEst	1210263
AA412047	DBEst	2070761
AA088231	DBEst	1633778
AA443712	DBEst	2156387
H82435	DBEst	1060524
AA464698	DBEst	2189582
AA487468	DBEst	2217632
W84658	DBEst	1395838
AA608775	DBEst	2457203
AA486538	DBEst	2216702
AA427737	DBEst	2111578
N63777	DBEst	1211606
AA443140	DBEst	2155815
AA496884	DBEst	2230205
AA151621	DBEst	1720194
R01246	DBEst	750982
N62735	DBEst	1210564
R23270	DBEst	778158
AA426025	DBEst	2106558
R92801	DBEst	965155
N46353	DBEst	1187519
AA453783	DBEst	2167452
AA608923	DBEst	2457351
N46845	DBEst	1188011
AA197344	DBEst	1791370
AA478618	DBEst	2207252
N63529	DBEst	1211358
AA478623	DBEst	2207257
R54443	DBEst	816345
AA481801	DBEst	2211353
H06266	DBEst	869818
N64024	DBEst	1211853
R85537	DBEst	943943
R49592	DBEst	825123
R40357	DBEst	821101
R40377	DBEst	821120
R15946	DBEst	768361
AA777637	DBEst	2837116
H25223	DBEst	894346
AA872602	DBEst	2968780
AA496957	DBEst	2230278

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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R40967	DBEst	821226
R40983	DBEst	821241
R16146	DBEst	768074
AA873604	DBEst	2969726
H19687	DBEst	888382
R51103	DBEst	813005
AA858296	DBEst	2946598
AA704448	DBEst	2714366
R41389	DBEst	816695
R16144	DBEst	768072
H92234	DBEst	1087812
AA496984	DBEst	2230305
AA858026	DBEst	2946328
AA464603	DBEst	2189487
AA013268	DBEst	1474525
R49033	DBEst	817795
AA704492	DBEst	2714410
N27028	DBEst	1141376
AA490044	DBEst	2220919
AA399633	DBEst	2052647
W57767	DBEst	1364502
AA421018	DBEst	2099851
AA420998	DBEst	2099831
N92293	DBEst	1264602
AA173408	DBEst	1753537
AA476258	DBEst	2204469
N29778	DBEst	1148298
N47075	DBEst	1188241
AA136541	DBEst	1697815
R09504	DBEst	761427
AA401347	DBEst	2053763
R07268	DBEst	759191
AA063577	DBEst	1557526
AA417356	DBEst	2077438
H95669	DBEst	1108811
AA599122	DBEst	2432747
AA143070	DBEst	1712574
H69538	DBEst	1039744
H75737	DBEst	1049749
R31789	DBEst	787632
AA416552	DBEst	2077513
AA191480	DBEst	1780142
N70023	DBEst	1226603
AA609365	DBEst	2457793
R60731	DBEst	831426
AA015663	DBEst	1476693
AA621047	DBEst	2524986
AA400194	DBEst	2054065
R61796	DBEst	832491
AA453759	DBEst	2167428
R41376	DBEst	816682
T55714	DBEst	657575
AA621363	DBEst	2525302
R45572	DBEst	823786
AA055474	DBEst	1547879

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA621480	DBEst	2525419
H97970	DBEst	1118855
R49102	DBEst	820172
R61390	DBEst	832085
AA478478	DBEst	2207112
AA598970	DBEst	2432269
AA398431	DBEst	2051540
AA759046	DBEst	2806909
AA598397	DBEst	2432281
R59304	DBEst	829999
N55461	DBEst	1198340
AA426309	DBEst	2107789
AA398384	DBEst	2051556
AA598828	DBEst	2432500
R59370	DBEst	830065
AA451890	DBEst	2165559
AA598841	DBEst	2432513
AA725564	DBEst	2743271
AA451911	DBEst	2165580
AA398757	DBEst	2051916
H05037	DBEst	868589
AA463449	DBEst	2188333
AA599574	DBEst	2433199
N59234	DBEst	1203124
N59287	DBEst	1203177
W86779	DBEst	1400507
N59289	DBEst	1203179
AA024494	DBEst	1489454
AA463230	DBEst	2188114
AA025274	DBEst	1489474
AA427954	DBEst	2111699
W87749	DBEst	1401824
AA046939	DBEst	1524838
H93081	DBEst	1099409
AA025538	DBEst	1490975
AA425773	DBEst	2106493
AA181207	DBEst	1764793
AA027266	DBEst	1492141
N24703	DBEst	1138853
AA432100	DBEst	2115808
N30131	DBEst	1148651
AA432080	DBEst	2115788
N30205	DBEst	1148725
AA425437	DBEst	2106202
AA446859	DBEst	2159524
AA191433	DBEst	1780112
W38026	DBEst	1319620
N75302	DBEst	1237880
AA173888	DBEst	1754083
AA447540	DBEst	2161210
N34441	DBEst	1155583
AA609311	DBEst	2457739
AA158346	DBEst	1733157
AA425851	DBEst	2106494
AA196287	DBEst	1791869

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA609122	DBEst	2457550
AA490158	DBEst	2221033
AA478794	DBEst	2207428
AA490162	DBEst	2221037
N64774	DBEst	1212603
AA609134	DBEst	2457562
AA496790	DBEst	2230111
AA488070	DBEst	2215501
AA609189	DBEst	2457617
H06273	DBEst	869825
AA486195	DBEst	2216411
AA411009	DBEst	2070115
AA479284	DBEst	2207840
N49213	DBEst	1190379
R32440	DBEst	788283
AA609218	DBEst	2457646
AA479494	DBEst	2208050
R41461	DBEst	816763
R49329	DBEst	820284
AA704613	DBEst	2714531
R16175	DBEst	768103
AA001219	DBEst	1437294
R49339	DBEst	820294
AA862465	DBEst	2954944
R16053	DBEst	768428
R16241	DBEst	768489
R49436	DBEst	820334
AA708279	DBEst	2718197
R49559	DBEst	820403
AA863449	DBEst	2955928
R37738	DBEst	795194
AA865878	DBEst	2958154
AA779165	DBEst	2838496
AA292429	DBEst	1940408
R49587	DBEst	820431
AA894927	DBEst	3031328
R42536	DBEst	817298
AA394130	DBEst	2047101
R49117	DBEst	820187
R40025	DBEst	820774
AA700222	DBEst	2703185
AA172372	DBEst	1751420
N29850	DBEst	1148370
AA188710	DBEst	1775797
N93141	DBEst	1265450
AA158162	DBEst	1732956
AA486731	DBEst	2216895
N47500	DBEst	1188666
AA435998	DBEst	2140912
AA496788	DBEst	2230109
AA599107	DBEst	2432732
N30621	DBEst	1149141
AA412250	DBEst	2070820
N93601	DBEst	1265910
N56875	DBEst	1200765

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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R74206	DBEst	848576
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H47114	DBEst	923166
AA158211	DBEst	1733022
AA421282	DBEst	2100107
AA149579	DBEst	1720380
N74367	DBEst	1231652
AA400412	DBEst	2054283
R93744	DBEst	967910
AA151945	DBEst	1720783
R98047	DBEst	983707
H81554	DBEst	1059643
AA431750	DBEst	2115458
AA400434	DBEst	2054305
R02336	DBEst	752072
AA191322	DBEst	1779984
H50654	DBEst	990495
H48269	DBEst	986656
AA180060	DBEst	1761326
H53141	DBEst	993288
AA421479	DBEst	2100304
H14348	DBEst	879168
R49714	DBEst	820437
R41724	DBEst	817431
AA621644	DBEst	2525583
H98757	DBEst	1123425
R60995	DBEst	831690
AA621665	DBEst	2525604
R59116	DBEst	829811
R59722	DBEst	830417
H99799	DBEst	1124467
AA621132	DBEst	2525071
R40057	DBEst	822754
H17333	DBEst	883573
N20833	DBEst	1125971
R40176	DBEst	822802
R51357	DBEst	813259
H22949	DBEst	891644
R59621	DBEst	830316
R37633	DBEst	795089
R45165	DBEst	823519
AA757764	DBEst	2805627
AA463444	DBEst	2188328
AA452156	DBEst	2165825
AA815407	DBEst	2885003
H05072	DBEst	868624
AA452165	DBEst	2165834
AA789301	DBEst	2849421
AA412059	DBEst	2070648
AA789328	DBEst	2849448
AA708298	DBEst	2718216
AA453170	DBEst	2166839
AA812973	DBEst	2883037
AA426216	DBEst	2107619
AA262351	DBEst	1898772

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA418004	DBEst	2079823
AA292054	DBEst	1940040
AA812996	DBEst	2883060
AA463476	DBEst	2188360
AA476502	DBEst	2204713
H05741	DBEst	869293
AA843718	DBEst	2933074
H05769	DBEst	869321
AA463483	DBEst	2188367
AA418015	DBEst	2079834
H05770	DBEst	869322
N22904	DBEst	1137054
H05777	DBEst	869329
AA454079	DBEst	2167748
AA868278	DBEst	2963723
H04992	DBEst	868544
N66177	DBEst	1218302
AA454080	DBEst	2167749
N62178	DBEst	1209991
W88587	DBEst	1404059
AA400247	DBEst	2054313
AA620446	DBEst	2524385
AA489804	DBEst	2220688
H96630	DBEst	1110116
N62231	DBEst	1210060
W88745	DBEst	1404227
N68993	DBEst	1225154
W93299	DBEst	1421898
AA460675	DBEst	2185795
N62340	DBEst	1210169
N62376	DBEst	1210205
AA135870	DBEst	1696844
N38791	DBEst	1161998
N52362	DBEst	1193528
AA620401	DBEst	2524340
T97723	DBEst	747068
W20486	DBEst	1295075
N64379	DBEst	1212208
AA088701	DBEst	1634222
AA040332	DBEst	1516663
N74995	DBEst	1237541
H79845	DBEst	1057934
AA609666	DBEst	2458094
AA454177	DBEst	2167846
AA496948	DBEst	2230269
AA479299	DBEst	2207855
N49267	DBEst	1190433
H63111	DBEst	1017912
AA456286	DBEst	2179496
AA425160	DBEst	2107471
AA460530	DBEst	2185650
N66866	DBEst	1218991
AA479308	DBEst	2207864
AA436138	DBEst	2141052
AA609304	DBEst	2457732

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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N50787	DBEst	1191953
AA456022	DBEst	2178798
AA456437	DBEst	2179013
AA132964	DBEst	1694462
R45192	DBEst	823546
N68075	DBEst	1224236
AA609474	DBEst	2457902
AA191424	DBEst	1780103
AA456323	DBEst	2179533
AA865265	DBEst	2957541
AA775899	DBEst	2835233
AA875888	DBEst	2985247
R40129	DBEst	820825
R40502	DBEst	822877
AA490469	DBEst	2219642
R50755	DBEst	812657
AA873089	DBEst	2969211
AA496452	DBEst	2229773
AA476274	DBEst	2204485
AA863086	DBEst	2955565
R37472	DBEst	794928
AA425821	DBEst	2107641
AA862371	DBEst	2954850
AA704187	DBEst	2714105
AA459400	DBEst	2184307
AA863292	DBEst	2955771
AA455935	DBEst	2178711
R51273	DBEst	813175
R42061	DBEst	817007
R49708	DBEst	820434
AA455929	DBEst	2178705
AA071089	DBEst	1578449
N26769	DBEst	1141117
H58175	DBEst	1011007
N55357	DBEst	1198236
H40880	DBEst	916932
AA040742	DBEst	1517020
H40921	DBEst	916973
R74321	DBEst	848691
AA283631	DBEst	1927769
H61464	DBEst	1014296
H15913	DBEst	880733
AA284634	DBEst	1927750
AA098867	DBEst	1645051
H15926	DBEst	880746
AA283020	DBEst	1925944
AA757455	DBEst	2805318
W85913	DBEst	1398342
AA701300	DBEst	2704465
AA708058	DBEst	2717976
AA703536	DBEst	2713454
N71714	DBEst	1228426
H61223	DBEst	1014055
AA703553	DBEst	2713471
N71758	DBEst	1228470

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA292700	DBEst	1940694
AA148505	DBEst	1721549
AA292655	DBEst	1940711
AA496253	DBEst	2229574
AA134862	DBEst	1695363
AA490901	DBEst	2220074
AA491292	DBEst	2220465
AA489068	DBEst	2218670
AA488875	DBEst	2218477
AA278849	DBEst	1920313
H40536	DBEst	916588
H85020	DBEst	1064722
AA459909	DBEst	2183355
R26785	DBEst	782920
AA016292	DBEst	1477350
R19410	DBEst	773020
R82595	DBEst	861986
H83996	DBEst	1062667
H40323	DBEst	916375
R82522	DBEst	861913
H85345	DBEst	1064319
H48070	DBEst	924122
H86559	DBEst	1068138
W96174	DBEst	1426080
R82802	DBEst	862193
N47691	DBEst	1188857
AA443886	DBEst	2156561
AA677240	DBEst	2657762
AA677327	DBEst	2657849
AA706839	DBEst	2716757
AA707336	DBEst	2717254
N21514	DBEst	1126684
AA707402	DBEst	2717320
AA430527	DBEst	2111084
AA676225	DBEst	2656747
AA707086	DBEst	2717004
N59251	DBEst	1203141
AA701677	DBEst	2704842
AA677025	DBEst	2657547
AA430506	DBEst	2111096
N62763	DBEst	1210592
AA701668	DBEst	2704833
AA707550	DBEst	2717468
AA677336	DBEst	2657858
AA430409	DBEst	2111111
AA676441	DBEst	2656963
N62188	DBEst	1210017
AA430410	DBEst	2111112
AA210699	DBEst	1809353
AA521448	DBEst	2261991
R53929	DBEst	815831
AA214559	DBEst	1813184
H08208	DBEst	873030
AA148542	DBEst	1721567

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<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
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AA101875	DBEst	1645278
AA465355	DBEst	2191522
N59553	DBEst	1203443
R85452	DBEst	943858
R93309	DBEst	967475
H59805	DBEst	1012637
R98072	DBEst	983732
H28090	DBEst	898443
N65950	DBEst	1218075
AA293300	DBEst	1941391
N63445	DBEst	1211274
AA703609	DBEst	2713527
W86106	DBEst	1398536
H62421	DBEst	1015253
AA682863	DBEst	2669546
AA285018	DBEst	1927699
N72888	DBEst	1229992
AA701527	DBEst	2704692
AA292086	DBEst	1940072
N66178	DBEst	1218303
N66205	DBEst	1218330
AA701550	DBEst	2704715
AA682861	DBEst	2669544
AA757659	DBEst	2805522
W86908	DBEst	1400647
AA682780	DBEst	2669463
AA488892	DBEst	2218494
AA459110	DBEst	2184017
AA278594	DBEst	1919932
AA459119	DBEst	2184026
AA278764	DBEst	1920084
AA459123	DBEst	2184030
AA634381	DBEst	2557595
AA489232	DBEst	2218834
AA634427	DBEst	2557641
AA504139	DBEst	2240299
AA504132	DBEst	2240292
AA703169	DBEst	2706282
H86461	DBEst	1068040
H84130	DBEst	1062801
H15085	DBEst	879905
W96187	DBEst	1426093
H51100	DBEst	990941
H86545	DBEst	1068124
AA669557	DBEst	2631056
AA633768	DBEst	2556982
H04399	DBEst	867332
H92588	DBEst	1088166
H92875	DBEst	1099203
H00298	DBEst	863231
AA683050	DBEst	2668941
R32354	DBEst	788197
AA676268	DBEst	2656790
AA707084	DBEst	2717002
N51614	DBEst	1192780

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
N24580	DBEst	1138730
N23134	DBEst	1137284
AA434435	DBEst	2139349
AA707659	DBEst	2717577
N48003	DBEst	1189169
N59336	DBEst	1203226
AA437370	DBEst	2142284
AA703115	DBEst	2706228
AA706795	DBEst	2716713
AA427563	DBEst	2111431
AA707680	DBEst	2717598
N51752	DBEst	1192918
AA678024	DBEst	2658546
N23192	DBEst	1137342
AA455133	DBEst	2177909
H16789	DBEst	883029
AA521371	DBEst	2261914
H16821	DBEst	883061
AA465704	DBEst	2191871
N63894	DBEst	1211723
AA709036	DBEst	2718954
N63744	DBEst	1211573
H48148	DBEst	924200
N68679	DBEst	1224840
AA620715	DBEst	2524654
N65971	DBEst	1218096
AA426352	DBEst	2106642
AA778663	DBEst	2837994
H38845	DBEst	908344
AA779449	DBEst	2838780
H45266	DBEst	921318
AA779457	DBEst	2838788
N66070	DBEst	1218195
AA701411	DBEst	2704576
AA757466	DBEst	2805329
N67797	DBEst	1219922
AA701412	DBEst	2704577
AA701948	DBEst	2705061
AA398521	DBEst	2051694
N66158	DBEst	1218283
W46769	DBEst	1331507
AA394197	DBEst	2047216
AA704222	DBEst	2714140
AA293441	DBEst	1940975
AA757909	DBEst	2805772
W46783	DBEst	1331659
AA293443	DBEst	1940977
AA757806	DBEst	2805669
AA704587	DBEst	2714505
AA703208	DBEst	2706321
AA293206	DBEst	1941487
N48792	DBEst	1189958
AA757711	DBEst	2805574
AA703198	DBEst	2706311
AA757717	DBEst	2805580
N26928	DBEst	1141276

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA682642	DBEst	2669923
AA504457	DBEst	2240617
AA459249	DBEst	2184156
AA504246	DBEst	2240406
AA279060	DBEst	1920525
AA504250	DBEst	2240410
AA279133	DBEst	1920599
AA459358	DBEst	2184265
AA626705	DBEst	2539092
AA480894	DBEst	2210446
R88709	DBEst	953536
AA404619	DBEst	2058847
H01858	DBEst	864791
AA463446	DBEst	2188330
R91146	DBEst	958686
AA063459	DBEst	1557399
AA621138	DBEst	2525077
H01926	DBEst	864859
AA205403	DBEst	1803394
AA598548	DBEst	2432131
R31567	DBEst	787410
AA018412	DBEst	1481878
H00660	DBEst	863593
AA018232	DBEst	1481488
R89363	DBEst	954190
R89287	DBEst	954114
H01820	DBEst	864753
R92201	DBEst	959741
AA678975	DBEst	2659497
AA701232	DBEst	2704397
AA458867	DBEst	2183774
AA434400	DBEst	2139314
AA252470	DBEst	1887451
N48169	DBEst	1189335
AA706829	DBEst	2716747
N62206	DBEst	1210035
AA700690	DBEst	2703855
AA286819	DBEst	1933682
N23400	DBEst	1137550
AA278320	DBEst	1920259
AA706964	DBEst	2716882
AA465158	DBEst	2191325
AA280279	DBEst	1921953
AA630100	DBEst	2552711
AA490520	DBEst	2219693
AA490892	DBEst	2220065
AA251354	DBEst	1886317
AA781508	DBEst	2840839
AA491295	DBEst	2220468
AA491297	DBEst	2220470
AA482282	DBEst	2209960
AA490522	DBEst	2219695
N68510	DBEst	1224671
H38660	DBEst	908159
AA504478	DBEst	2240638
H63763	DBEst	1018564

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
N70682	DBEst	1227262
H37909	DBEst	907408
AA775447	DBEst	2834781
N70688	DBEst	1227268
AA775872	DBEst	2835206
N71049	DBEst	1227629
H60696	DBEst	1013528
AA505117	DBEst	2241277
N69528	DBEst	1225689
AA757732	DBEst	2805595
N30222	DBEst	1148742
AA757918	DBEst	2805781
N30225	DBEst	1148745
W46944	DBEst	1331816
AA758451	DBEst	2806314
N48988	DBEst	1190154
AA700811	DBEst	2703976
AA421603	DBEst	2100601
W49629	DBEst	1337884
AA421515	DBEst	2100611
N40968	DBEst	1164566
AA680367	DBEst	2656674
AA421335	DBEst	2100160
N30256	DBEst	1148776
W69271	DBEst	1378746
AA777384	DBEst	2836715
AA678087	DBEst	2658609
AA279396	DBEst	1920879
AA620757	DBEst	2524696
AA875893	DBEst	2985252
R33456	DBEst	789314
AA872341	DBEst	2968519
R34225	DBEst	790083
AA857413	DBEst	2945715
R34273	DBEst	790131
AA018655	DBEst	1481920
R92362	DBEst	959902
R93069	DBEst	965423
AA679067	DBEst	2659589
AA019062	DBEst	1482453
R92601	DBEst	960141
H02778	DBEst	865711
H03436	DBEst	866369
R72244	DBEst	846276
H02307	DBEst	865240
R91566	DBEst	959106
R91583	DBEst	959123
N48261	DBEst	1189427
H84915	DBEst	1064410
N51225	DBEst	1192391
AA706967	DBEst	2716885
N64494	DBEst	1212323
AA280381	DBEst	1922038
N26628	DBEst	1140976
N62348	DBEst	1210177
N23606	DBEst	1137756

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA678160	DBEst	2658682
N27123	DBEst	1141471
N45236	DBEst	1186402
AA701328	DBEst	2704493
AA282599	DBEst	1925515
H95976	DBEst	1109118
N51362	DBEst	1192528
N70193	DBEst	1226773
N24155	DBEst	1138305
AA663941	DBEst	2617932
AA252348	DBEst	1887311
AA633825	DBEst	2557039
AA488898	DBEst	2218500
AA489016	DBEst	2218618
H60739	DBEst	1013571
N71029	DBEst	1227609
R38391	DBEst	795847
H66840	DBEst	1025580
R88440	DBEst	953267
H69022	DBEst	1030272
R87531	DBEst	946344
N76088	DBEst	1238666
R88672	DBEst	953499
N30747	DBEst	1149267
AA421352	DBEst	2100177
N27086	DBEst	1141434
AA704615	DBEst	2714533
AA758379	DBEst	2806242
AA477404	DBEst	2206038
N38839	DBEst	1162046
AA677880	DBEst	2658402
AA682671	DBEst	2669952
W70065	DBEst	1379326
AA477283	DBEst	2205917
AA758152	DBEst	2806015
N57530	DBEst	1201420
W74701	DBEst	1384924
AA402875	DBEst	2056629
AA682623	DBEst	2669904
N32895	DBEst	1153294
W69743	DBEst	1379074
AA402965	DBEst	2056745
N32904	DBEst	1153303
AA777700	DBEst	2837179
AA402040	DBEst	2056040
AA427924	DBEst	2111686
AA481269	DBEst	2210821
AA457039	DBEst	2179759
AA431772	DBEst	2115480
AA282971	DBEst	1925885
AA775774	DBEst	2835108
AA775364	DBEst	2834698
R34566	DBEst	791467
AA019338	DBEst	1482749
R92812	DBEst	965166
R34568	DBEst	791469

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA279990	DBEst	1921519
H03955	DBEst	866888
AA021586	DBEst	1485257
R86764	DBEst	945740
R94495	DBEst	969890
H04757	DBEst	868309
R94504	DBEst	969899
AA702714	DBEst	2705827
AA021188	DBEst	1484922
R94542	DBEst	969937
R93591	DBEst	967757
N51367	DBEst	1192533
N74679	DBEst	1231964
H96554	DBEst	1110040
N51386	DBEst	1192552
AA417622	DBEst	2079449
H97701	DBEst	1118586
AA699914	DBEst	2702877
AA417761	DBEst	2079562
AA707225	DBEst	2717143
H97851	DBEst	1118736
N33236	DBEst	1153635
AA700758	DBEst	2703923
N50632	DBEst	1191798
N29457	DBEst	1147977
AA699931	DBEst	2702894
AA465354	DBEst	2191521
H98655	DBEst	1123323
AA700867	DBEst	2704032
AA700871	DBEst	2704036
AA465238	DBEst	2191405
AA489042	DBEst	2218644
AA206454	DBEst	1801834
AA196979	DBEst	1792570
AA670123	DBEst	2631622
AA205432	DBEst	1803422
AA504162	DBEst	2240322
AA443638	DBEst	2156313
H15539	DBEst	880359
H51122	DBEst	990963
H77595	DBEst	1055684
N66933	DBEst	1219058
R85939	DBEst	944345
H25551	DBEst	894674
N67007	DBEst	1219132
H87795	DBEst	1069374
AA856874	DBEst	2945176
R85260	DBEst	943666
H44032	DBEst	920084
AA857496	DBEst	2945798
H91861	DBEst	1087439
AA443903	DBEst	2156578
AA700989	DBEst	2704154
AA401457	DBEst	2053665
AA700997	DBEst	2704162
N32587	DBEst	1152986

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA405190	DBEst	2063740
N30367	DBEst	1148887
AA777712	DBEst	2837191
AA678176	DBEst	2658698
AA402889	DBEst	2056786
N47014	DBEst	1188180
AA733012	DBEst	2754371
AA678190	DBEst	2658712
AA704713	DBEst	2714631
AA733027	DBEst	2754386
AA708248	DBEst	2718166
N34876	DBEst	1156018
AA777428	DBEst	2836759
N47333	DBEst	1188499
AA701026	DBEst	2704191
AA704278	DBEst	2714196
AA456818	DBEst	2179538
AA282985	DBEst	1925918
AA456821	DBEst	2179541
AA670330	DBEst	2631829
AA485132	DBEst	2214351
AA775840	DBEst	2835174
R09063	DBEst	760986
H04247	DBEst	867180
R07891	DBEst	759814
R95749	DBEst	981409
AA021434	DBEst	1485150
R08311	DBEst	760234
R37978	DBEst	795434
H83123	DBEst	1061793
R56840	DBEst	826946
AA702404	DBEst	2705517
R96903	DBEst	982563
H98619	DBEst	1123287
N32949	DBEst	1153348
N50786	DBEst	1191952
H99120	DBEst	1123788
AA700090	DBEst	2703053
AA699359	DBEst	2702553
N91117	DBEst	1444444
AA458938	DBEst	2183845
AA699443	DBEst	2702637
H99202	DBEst	1123870
AA700167	DBEst	2703130
AA701481	DBEst	2704646
AA459364	DBEst	2184271
H99661	DBEst	1124329
AA704792	DBEst	2714710
AA455237	DBEst	2178013
AA700553	DBEst	2703516
N34466	DBEst	1155608
AA773478	DBEst	2825049
AA205598	DBEst	1803606
AA773358	DBEst	2824929
AA504137	DBEst	2240297
AA283874	DBEst	1928083

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA629986	DBEst	2552597
AA676625	DBEst	2657147
AA504505	DBEst	2240665
AA872402	DBEst	2968580
H75853	DBEst	1049924
H39024	DBEst	908523
H89955	DBEst	1080385
AA699864	DBEst	2702827
H94670	DBEst	1102303
N74014	DBEst	1231299
AA857015	DBEst	2945317
R21423	DBEst	776204
R20813	DBEst	775594
AA666269	DBEst	2620882
AA465389	DBEst	2191556
R23215	DBEst	778103
H95638	DBEst	1108780
AA258001	DBEst	1894433
H20046	DBEst	888741
R23246	DBEst	778134
R85643	DBEst	944049
AA285155	DBEst	1928118
R39446	DBEst	796902
R85509	DBEst	943915
AA707714	DBEst	2717632
AA436327	DBEst	2141241
AA707728	DBEst	2717646
AA777886	DBEst	2836879
AA678318	DBEst	2658840
AA774649	DBEst	2833983
AA677920	DBEst	2658442
AA704508	DBEst	2714426
N50655	DBEst	1191821
AA707696	DBEst	2717614
N50661	DBEst	1191827
AA677923	DBEst	2658445
N34316	DBEst	1155458
AA732917	DBEst	2754276
AA703391	DBEst	2713309
AA482127	DBEst	2209805
N50406	DBEst	1191572
AA758470	DBEst	2806333
AA703393	DBEst	2713311
AA436401	DBEst	2141315
N47388	DBEst	1188554
AA436405	DBEst	2141319
AA682624	DBEst	2669905
AA704749	DBEst	2714667
AA676907	DBEst	2657429
AA482007	DBEst	2209685
AA485254	DBEst	2214473
AA779380	DBEst	2838711
AA482031	DBEst	2209709
AA491212	DBEst	2220385
AA705423	DBEst	2715341
AA676768	DBEst	2657290

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA035137	DBEst	1507307
AA490611	DBEst	2219784
R11498	DBEst	764233
R63313	DBEst	835192
AA708676	DBEst	2718594
R63497	DBEst	835376
R16837	DBEst	770447
R67617	DBEst	840255
R63971	DBEst	835850
AA057425	DBEst	1550066
R97220	DBEst	982880
R54733	DBEst	819255
R16760	DBEst	770370
R10279	DBEst	762235
AA054643	DBEst	1545567
AA054439	DBEst	1545575
R54672	DBEst	819130
H54796	DBEst	995216
R12708	DBEst	765784
R62371	DBEst	834250
H54659	DBEst	995026
AA778756	DBEst	2838087
N91821	DBEst	1264130
AA701351	DBEst	2704516
AA778826	DBEst	2838157
H99415	DBEst	1124083
AA778846	DBEst	2838177
N31605	DBEst	1152004
AA701361	DBEst	2704526
AA699410	DBEst	2702604
N79061	DBEst	1241762
N20054	DBEst	1124721
AA701900	DBEst	2705013
AA699707	DBEst	2702670
N62400	DBEst	1210229
AA465166	DBEst	2191333
AA779251	DBEst	2838582
N62418	DBEst	1210247
AA701909	DBEst	2705022
AA629910	DBEst	2552521
AA504253	DBEst	2240413
AA287828	DBEst	1933544
AA287318	DBEst	1933018
AA676865	DBEst	2657387
AA505063	DBEst	2241223
AA286807	DBEst	1933670
AA286814	DBEst	1933677
AA677629	DBEst	2658151
H23959	DBEst	892654
AA465521	DBEst	2191688
AA129135	DBEst	1688902
AA013099	DBEst	1474135
AA465536	DBEst	2191703
AA629999	DBEst	2552610
AA017104	DBEst	1479268
AA127014	DBEst	1687643

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
N53480	DBEst	1194646
AA015819	DBEst	1476849
N53488	DBEst	1194654
R26283	DBEst	782418
AA262080	DBEst	1898204
AA707785	DBEst	2717703
N57487	DBEst	1201377
N50428	DBEst	1191594
AA704752	DBEst	2714670
AA707847	DBEst	2717765
N47445	DBEst	1188611
AA707741	DBEst	2717659
AA703383	DBEst	2713301
N50654	DBEst	1191820
AA682545	DBEst	2669826
N50935	DBEst	1192101
AA682563	DBEst	2669844
W80457	DBEst	1391513
AA707171	DBEst	2717089
AA425791	DBEst	2107629
AA703519	DBEst	2713437
AA428341	DBEst	2110206
N50828	DBEst	1191994
AA706982	DBEst	2716900
N50859	DBEst	1192025
AA682637	DBEst	2669918
W80724	DBEst	1391742
AA677650	DBEst	2658172
AA043945	DBEst	1521952
R38923	DBEst	796379
AA491256	DBEst	2220429
AA043772	DBEst	1521630
R39924	DBEst	797540
AA455654	DBEst	2178430
AA489696	DBEst	2219298
R10382	DBEst	762338
R71738	DBEst	845770
AA708201	DBEst	2718119
R10890	DBEst	763625
R64686	DBEst	836565
AA708001	DBEst	2717919
R65993	DBEst	838631
H29858	DBEst	900768
R11217	DBEst	763952
R66367	DBEst	839005
H85536	DBEst	1064575
H56453	DBEst	1005097
R16555	DBEst	770165
R16566	DBEst	770176
AA708301	DBEst	2718219
AA708327	DBEst	2718245
H29897	DBEst	900807
H57105	DBEst	1009937
R72380	DBEst	846412
N21015	DBEst	1126185
N62499	DBEst	1210328

TABLE 2A-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA705966	DBEst	2715884
N20322	DBEst	1125277
N35469	DBEst	1156611
AA705977	DBEst	2715895
N62593	DBEst	1210422
N62726	DBEst	1210555
AA677215	DBEst	2657737
W37782	DBEst	1319593
N21338	DBEst	1126508
AA699567	DBEst	2703714
N35825	DBEst	1156967
AA490843	DBEst	2220016
AA287949	DBEst	1933772
AA776942	DBEst	2836273
AA704908	DBEst	2714826
AA287964	DBEst	1933920
AA504779	DBEst	2240939
AA705219	DBEst	2715137
AA287067	DBEst	1934091
AA705072	DBEst	2714990
AA287090	DBEst	1934097
AA705077	DBEst	2714995

TABLE 2D-1

<u>ACC NUM</u>	<u>DATABASE</u>	<u>GI NBR</u>
AA406601	DBEst	2064611
AA451904	DBEst	2165573
W73140	DBEst	1383275
AA070226	DBEst	1577585
AA446108	DBEst	2158773
AA459401	DBEst	2184308
N48698	DBEst	1189864
AA676466	DBEst	2656988
AA775616	DBEst	2834950
AA872020	DBEst	2968058

Table 3A

IMAGE CL	Gen Bank	Ave-Normal- expression	Min- expression-of- 29	Max-fold- down	Count-down tumors	Count-down cellines	Chromosome	Location	Tissue 1	Tissue 2	Tissue 3
# ONE ID	Cluster Id	Accession Number									
4 292388	Hs.198955	N79220	41.75	6.27	0.00	1.00			Adipose	Uterus	Tissue 3
8 124781	Hs.169525	RD1118	15.55	0.10	9.00	6.00			Neural	Cervix	Umbilical cord
12 194005	Hs.93121	H51262	23.64	4.08	1.00	0.00	X	295.57	Adipose	Stomach	Pool
14 486544	Hs.184815	AA043334	16.39	1.00	2.00	0.00			Thyroid	Pancreas	Breast
15 810010	Hs.170040	AA455210	11.59	2.27	1.00	0.00	6	60.34	Ignore	Aorta	Breast
19 47881	Hs.188790	AA11782	95.82	15.91	1.00	0.00	3	694.64	Marrow	Gall bladder	Ear
22 205833	Hs.75703	H62985	5.50	1.00	0.00	2.00	17	295.65		Gall bladder	Blood
27 810452	Hs.75927	AA457118	59.72	11.50	1.00	0.00	20	242.59	Adrenal gland	Ovary	Testis
30 768581	Hs.340	AA425102	150.57	1.00	150.57	6.00			Nose	Pituitary	Pancreas
34 307190	Hs.198160	W16724	10.74	0.10	8.00	6.00	11	375.95	Lymph node	Leydig	Nose
35 141562	Hs.23590	R73003	284.36	55.69	1.00	0.00			Ear	Pituitary	Aorta
36 245330	Hs.75983	N54596	17.81	2.14	2.00	2.00	11	18.42		Blood	Lymph
48 770192	Hs.81337	AA434102	8.17	1.00	0.00	2.00			Ovary	Pituitary	Pituitary
50 51408	Hs.158007	H19436	8.17	1.00	0.00	3.00	6	171.78	CNS	Pituitary	Pituitary
51 242037	Hs.92374	H93328	18.85	2.32	5.00	1.00			Spleen	Testis	Pituitary
52 201690	Hs.127799	H48706	21.85	1.00	0.00	1.00	11	348.77	Tonsil	Parathyroid	Germ cell
55 23772	Hs.78768	R38184	18.10	1.00	2.00	1.00	22	28.89	Ignore	Adipose	Breast
59 144816	Hs.24020	R78281	10.72	1.98	5.42	0.00	9	339.69	Pituitary	Parathyroid	Lymph
60 34852	Hs.75283	R19828	58.37	8.43	1.00	2.00	11	348.47	Small intestine	Ear	Aorta
63 810551	Hs.155240	AA464568	9.43	0.74	12.81	6.00	12	251.25	Smooth muscle	Breast	Pituitary
68 328901	Hs.152213	W49872	17.94	0.55	32.62	6.00	3	188.59	Ear	Ovary	Whole embryo
75 809776	Hs.82127	AA454784	5.10	1.00	0.00	1.00	15	279.13	Nose	Adipose	Tonsil
86 49391	Hs.78976	H15215	121.15	12.64	10.06	0.00	X	80.62	Pituitary	Adipose	Pituitary
88 308771	Hs.50145	N91807	15.31	2.79	5.46	1.00	X	277.53	Pituitary	Brain	Muscle
90 210575	Hs.2288	H55068	12.82	1.36	3.00	0.00			Pool	Parathyroid	CNS
94 753184	Hs.2316	AA400739	19.83	1.84	10.79	1.00			Ear	Thyroid	Stomach
96 299679	Hs.76945	W56528	18.34	3.10	5.27	1.00			Forebrain	Whole embryo	Cervix
97 124597	Hs.1531	R02373	17.70	1.13	15.69	1.00	3	607.77	Liver	Pool	Kidney
102 753820	Hs.105283	AA478724	77.63	3.12	24.87	2.00	12	228.74		Synovial men	Pituitary
108 764777	Hs.76894	AA448207	58.89	7.76	7.30	1.00	4	678.46	Gall bladder	Liver	Pool
109 84750	Hs.207831	T74567	12.82	1.71	7.35	1.00			Synovial men	CNS	Pituitary
110 79712	Hs.76473	T62347	40.08	6.14	7.83	10.00	6	620.93	Adipose	Smooth muscle	Spleen
111 840517	Hs.152978	AA468324	69.90	8.21	6.52	3.00	17	308.12	Bone marrow	Cervix	Skin
115 785585	Hs.64576	AA449459	32.04	2.52	12.73	7.00	4	420.51	Whole embryo	Pool	Heart
118 245330	Hs.75983	N54596	16.00	1.70	9.39	1.00	11	16.42		Lung	Breast
125 163337	Hs.77522	H42679	13.88	1.00	13.89	0.00	6	118.59	Lymph	Adipose	Cervix
126 427812	Hs.80865	AA001814	24.80	1.00	24.80	3.00	19	41.55	Thyroid	Breast	Parathyroid
129 26416	Hs.154210	R13546	23.12	1.00	23.12	3.00	1	293.77	Aorta	Ear	Adipose
140 824031	Hs.84	AA490348	26.00	1.51	17.19	7.00	6	78.3	Thyroid	Bone	Ovary
142 789369	Hs.34853	AA464156	55.22	1.00	55.22	1.00	2	437.34	Head and neck	Parathyroid	Smooth muscle
148 322617	Hs.181309	W39343	28.14	2.89	6.73	1.00	6	358.39	Ear	Eye	Parathyroid
145 741429	Hs.75649	AA401035	8.16	0.93	6.55	1.00	16	370.52	Umbilical cord	Smooth muscle	Synovial membrane
147 841691	Hs.76935	AA467169	90.21	16.05	5.52	1.00	12		Germ cell	Stomach	Umbilical cord
149 810889	Hs.77530	AA459292	25.06	0.00	250552.36	0.00			Trachea	Omentum	Lymph node
152 267634	Hs.65181	N34117	23.32	4.25	5.48	1.00	3	56.61	Forebrain	CNS	Heart
155 782787	Hs.77306	AA448184	9.20	0.73	12.58	8.00	5	354.65	Forebrain	CNS	Heart
157 727251	Hs.1244	AA412053	100.19	2.88	34.62	0.00	12	39.87	Esophagus	Synovial membrane	Parathyroid
162 823779	Hs.77436	AA490267	9.40	1.88	5.01	1.00	2	213.06	Lung	Adipose	Lymph
164 760224	Hs.88493	AA425139	48.91	2.82	18.65	1.00	19	247.58	Brain	Pituitary	Breast
171 825323	Hs.31053	AA504554	24.42	0.13	190.80	8.00	19	216.1	Lung	Heart	Colon
173 208001	Hs.118663	W70057	468.30	18.11	25.87	10.00	11	124.08	Small intestine	Parathyroid	Thyroid
174 80848	Hs.76325	T70057	92.14	8.16	11.50	0.00	4	404.13	Small intestine	Lymph node	Nose
175 888317	Hs.163874	AA588336	60.60	8.66	7.03	1.00	13	317.38	Cervix	Synovial membrane	Adrenal gland
177 241412	Hs.154365	H81220	7.55	1.03	7.34	2.00	13	130.71	Small intestine	Tonsil	CNS

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176	768639	Hs.102576	AA423532	158.81	5.48	25.88	17.00	6.00	3	430.32	Eyo	Brain	Pool
182	885221	Hs.82120	AA588611	6.89	0.55	12.71	8.00	6.00	6	648.15	Larynx	Ear	Bone
184	191654	Hs.106523	H338240	114.41	3.52	32.46	13.00	6.00	6	136.02	Spine	CNS	Pool
188	725877	Hs.2984	AA338948	130.62	9.95	13.12	18.00	0.00	2	46.9	Spleen	Tonsil	Muscle
188	630013	Hs.18834	AA219050	92.45	6.59	5.84	1.00	0.00	3	308.46	Eyo	Synovial mem	Blood
198	283191	Hs.7187	H91677	92.45	17.41	5.31	0.00	1.00	3	707.84	Ear	Cervix	LID not found
200	137208	Hs.132458	R38415	12.07	0.78	15.53	9.00	0.00	4	240.08	Pool	Lung	LID not found
217	241382	Hs.108877	H91281	33.92	6.62	5.12	1.00	0.00	4	697.77	Pool	LID not found	Other
222	195051	Hs.7420	H91137	9.71	0.21	46.66	9.00	6.00	6	147.86	Adipose	Stomach	Parathyroid
229	344282	Hs.25621	H70189	24.12	3.34	7.22	1.00	0.00	3	435.35	Esophagus	Ear	Adrenal gland
235	293336	Hs.16335	H64734	8.89	1.13	8.77	3.00	1.00	6	54.46	Breast	CNS	Pool
250	66555	Hs.13011	H57069	9.07	0.19	47.78	3.00	4.00	16	308.46	Eyo	Synovial mem	Blood
262	121252	Hs.7503	H95711	56.24	8.91	6.53	2.00	0.00	11	707.84	Ear	Cervix	LID not found
266	66550	Hs.203487	H67022	15.86	1.54	10.18	3.00	0.00	17	240.08	Pool	Lung	LID not found
272	137508	Hs.18840	R39405	32.06	5.53	5.79	3.00	0.00	17	697.77	Pool	LID not found	Other
285	22074	Hs.724	H65180	18.13	1.59	11.40	1.00	1.00	1	174.05	Pool	Blood	Pool
296	430153	Hs.168426	AA010158	12.49	1.18	10.63	3.00	0.00	1	340.25	Ignore	LID not found	Other
302	286741	Hs.50425	H74055	19.71	2.91	6.76	1.00	0.00	11	202.51	Forelimb	Pool	LID not found
303	110503	Hs.168465	H69895	22.10	1.51	14.64	12.00	1.00	11	208.39	Pool	LID not found	Other
304	809422	Hs.6408	AA459901	47.02	2.11	22.26	7.00	0.00	2	727.12	Heart	Pool	LID not found
307	825842	Hs.75744	AA504772	6.94	0.10	60.38	7.00	6.00	6	222.36	Heart	Pool	LID not found
309	201030	Hs.38220	H48360	25.61	3.74	6.85	1.00	0.00	1	85.25	Pool	Synovial mem	Thyroid
320	181826	Hs.34401	H40449	9.52	1.01	9.41	1.00	0.00	1	309.46	Eyo	Nose	Lymph
321	196637	Hs.35035	R82665	38.26	1.40	27.29	7.00	3.00	12	361.71	Pool	LID not found	Other
325	201902	Hs.111278	H48711	12.53	2.19	11.87	3.00	0.00	15	198.97	Larynx	Stomach	Pool
329	245235	Hs.35036	H76508	45.56	4.09	5.14	1.00	0.00	12	247.33	Synovial mem	Thyroid	Parathyroid
335	38783	Hs.202713	R61042	33.91	6.60	38.41	8.00	6.00	4	328.68	Ear	Eye	Adrenal gland
345	196222	Hs.35052	R82662	37.51	0.98	5.05	2.00	5.00	6	151.95	Smooth musc	Synovial mem	Prostate
350	296168	Hs.204830	N74365	17.45	3.04	5.73	1.00	0.00	17	43.14	Ovary	Umbilical cord	Forelimb
359	42706	Hs.724	R60006	19.63	1.00	19.63	5.00	5.00	5	435.32	Peripheral ner	Aorta	Stomach
360	321738	Hs.83785	V43021	11.41	1.33	8.56	1.00	0.00	17	307.38	Esophagus	Synovial mem	Thymus
369	195658	Hs.35056	R50077	18.40	3.01	5.11	4.00	0.00	14	180.44	Pancreas	Whole embryo	Breast
376	268815	Hs.197458	N27159	86.75	0.80	108.95	22.00	4.00	14	238.65	Lymph	Stomach	Colon
382	770668	Hs.159223	AA434487	6.01	0.38	15.99	9.00	6.00	X	339.39	Tonsil	Germ Cell	Spleen
388	463445	Hs.12337	AA026831	18.86	1.00	18.96	2.00	5.00	2	421.81	Colon	Adrenal gland	Kidney
403	211206	Hs.124	H87398	18.59	2.80	7.00	1.00	0.00	10	128.91	Adipose	Colon	Kidney
406	327876	Hs.14070	V23757	71.82	1.78	40.77	1.00	2.00	17	117.99	Lymph node	Lymph	Small intestine
410	133273	Hs.103724	R29960	39.39	2.99	13.21	6.00	1.00	6	170.9	Adipose	Thymus	Thyroid
414	50182	Hs.201590	H17682	5.08	1.00	5.08	0.00	1.00	14	547.86	Cervix	Lymph	Tonsil
415	770864	Hs.12658	AA434504	89.34	16.85	5.64	1.00	0.00	6	299.09	Bone marrow	Smooth musc	Bone
418	140806	Hs.83920	R68310	107.60	15.33	7.02	1.00	0.00	11	544.54	CNS	Thyroid	Pool
420	124874	Hs.76087	R01139	390.74	0.10	390.73	11.00	6.00	10	510.66	Nose	Stomach	Stomach
422	129436	Hs.184931	T98236	102.73	0.12	855.30	9.00	6.00	6	180.44	Pancreas	Whole embryo	Breast
423	123790	Hs.191208	R01428	12.73	1.69	6.74	1.00	0.00	X	238.65	Lymph	Stomach	Colon
424	112629	Hs.2750	T85698	49.37	3.14	15.70	2.00	1.00	2	339.39	Tonsil	Germ Cell	Spleen
426	594540	Hs.159526	AA163807	6.79	1.00	6.79	2.00	1.00	10	128.91	Adipose	Colon	Kidney
438	244355	Hs.84	N75745	7.22	1.00	7.22	0.00	2.00	17	117.99	Lymph node	Lymph	Small intestine
443	244767	Hs.1192	N54344	13.64	2.23	6.13	1.00	0.00	6	170.9	Adipose	Thymus	Thyroid
446	823598	Hs.20315	AA463743	20.09	3.67	5.47	0.00	1.00	14	547.86	Cervix	Lymph	Tonsil
450	510032	Hs.15196	AA053051	9.68	0.98	10.08	6.00	4.00	6	299.09	Bone marrow	Smooth musc	Bone
456	50506	Hs.75485	H17504	34.62	3.53	9.81	2.00	0.00	11	544.54	CNS	Thyroid	Pool
460	153411	Hs.78807	R47976	103.88	2.64	38.40	2.00	6.00	10	510.66	Nose	Stomach	Stomach
464	766299	Hs.55155	AA424743	223.51	40.84	5.47	0.00	1.00	6	299.09	Bone marrow	Smooth musc	Bone
466	770670	Hs.189136	AA476272	76.33	3.99	19.12	9.00	5.00	11	544.54	CNS	Thyroid	Pool
471	41929	Hs.7805	R59062	211.10	32.55	5.48	3.00	0.00	10	510.66	Nose	Stomach	Stomach
472	144834	Hs.146308	R77251	8.95	1.35	5.76	0.00	1.00	6	299.09	Bone marrow	Smooth musc	Bone
475	753692	Hs.150203	AA406601	51.39	4.35	11.82	0.00	1.00	10	510.66	Nose	Stomach	Stomach

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482	60910	Hs.183556	T70098	30.62	5.77	5.31	2.00	1.00	1	115.45	Bone marrow	Omentum	Lymph
483	763529	Hs.75528	A446652	52.35	9.85	5.44	1.00	1.00		115.45	Head and nec	Adipose	Thyroid
484	214162	Hs.2687	H77766	263.04	3.96	73.43	9.00	3.00		115.45	Skin	Germ Cell	Liver
485	840364	Hs.172573	A4465628	76.01	15.16	5.01	0.00	1.00			Synovial mem	Ear	Bone
486	814782	Hs.78829	A4465611	84.20	9.26	9.10	0.00	1.00			Aorta	Stomach	Parathyroid
487	758329	Hs.194045	A4401236	49.38	5.16	9.54	3.00	2.00		455.47	Blood	CNS	Pooled
488	567414	Hs.84928	A4130646	30.02	4.15	7.23	1.00	0.00		455.47	Small intestine	Aorta	Pooled
489	768107	Hs.193163	A4453175	43.51	0.22	202.23	9.00	6.00		455.47	Small intestine	CNS	Pooled
500	609332	Hs.207803	A4167222	10.08	0.41	24.86	9.00	6.00		455.47	Small intestine	CNS	Pooled
504	198694	Hs.186543	R85132	125.76	20.28	6.32	1.00	0.00		485.94	Small intestine	CNS	Pooled
507	774082	Hs.86844	A4441835	125.83	19.91	6.32	2.00	1.00		485.94	Small intestine	CNS	Pooled
513	824074	Hs.97496	A4481227	12.79	0.44	28.78	9.00	6.00		401.99	CNS	Lung	Whole embryo
519	773217	Hs.10699	A4425757	5.10	0.55	9.28	5.00	4.00		271.74	Blood	Tonsil	Blood
521	701112	Hs.320	A4287404	80.18	15.72	5.10	1.00	0.00		22.79	Blood	Pooled	Eye
522	841436	Hs.180224	A4487370	864.89	105.97	8.35	2.00	0.00		56.09	Smooth muscle	Head and nec	Nose
523	231574	Hs.104640	H92821	14.80	1.47	10.07	6.00	0.00		32.24	Small intestine	Adipose	Head and nec
524	127925	Hs.100555	R08835	18.08	2.22	8.15	4.00	1.00		32.24	Small intestine	Adipose	Head and nec
525	323508	Hs.68151	W45690	32.80	0.10	326.04	7.00	6.00		29.93	Umbilical cord	Cervix	Adrenal gland
530	841308	Hs.75960	A4487215	133.81	4.78	27.98	5.00	4.00		432.31	Larynx	Spleen	-
533	788511	Hs.148957	A4452753	21.84	3.02	7.25	0.00	2.00		88.85	Skin	Pancreas	Ovary
535	591281	Hs.30680	A4156990	15.96	1.00	15.96	7.00	4.00		88.85	Nose	Esophagus	Skin
537	247546	Hs.2257	N58107	175.92	27.18	6.47	4.00	1.00					
541	86868	Hs.28787	T87270	1313.79	200.97	6.54	1.00	0.00		351.05	Synovial mem	Larynx	Skin
549	206001	Hs.118863	H60549	503.65	33.64	15.15	3.00	1.00		124.08	Parathyroid	Thyroid	Thyroid
553	841203	Hs.75350	A4486728	15.82	0.92	17.14	6.00	6.00		373.9	Nose	Uterus	Bone
558	245015	Hs.8127	N62646	28.71	5.62	5.21	1.00	0.00		552.97	Aorta	Blood	Lymph
561	840511	Hs.2064	A4487812	2532.12	105.95	23.80	13.00	1.00		552.97	Aorta	Blood	Lymph
562	814701	Hs.79078	A4481078	50.25	5.65	8.69	6.00	0.00		104.78	Neural	Thyroid	Umbilical cord
563	811771	Hs.154878	A4483452	11.87	0.64	18.44	6.00	2.00		-5.29	Ignote	Aorta	Spleen
564	835359	Hs.77860	A4457178	188.25	6.77	29.30	2.00	0.00		644.84	Gall bladder	Eye	Brain
566	815530	Hs.172813	A4457038	13.58	2.56	5.29	1.00	0.00		312.05	Cervix	Adipose	Bone
569	49184	Hs.100223	H16637	59.04	2.63	22.44	9.00	5.00		293.88	Heart	LID not found	Stomach
571	626602	Hs.11638	A4188155	37.77	0.55	66.65	9.00	6.00		510.47	Pericardial nei	Nose	Other
572	200882	Hs.108043	N50808	9.46	0.95	6.97	3.00	2.00		419.63	Spleen	CNS	Pancreas
573	210837	Hs.119222	H65678	341.41	38.71	8.82	1.00	0.00		419.63	Spleen	CNS	Bone
575	814460	Hs.76354	A4459247	5.26	0.59	8.85	8.00	8.00		410.77	Breast	Tonsil	Ear
578	243155	Hs.164352	H94469	97.31	12.67	7.68	5.00	0.00		475.25	Esophagus	Synovial mem	Aorta
577	108208	Hs.146812	T89767	30.82	4.45	6.84	2.00	0.00		475.25	Esophagus	Synovial mem	Liver
583	241003	Hs.173515	H81010	13.87	1.57	6.86	0.00	1.00		77.48	Adipose	Head and nec	Other
584	194704	Hs.205537	R89904	138.34	3.21	43.45	9.00	6.00		107.35	Heart	CNS	Germ Cell
585	128585	Hs.118786	R16598	247.62	4.09	60.49	10.00	3.00		360.96			
586	209277	Hs.13012	H63367	9.08	1.47	6.18	1.00	0.00			LID not found	Other	
586	141108	Hs.24704	R66219	30.01	0.74	40.64	14.00	0.00		281.64	Pooled	Pool	Tonsil
601	785816	Hs.165588	A4445048	44.57	0.08	561.25	14.00	0.00		148.87	Pituitary	LID not found	Other
605	154462	Hs.162583	R45684	19.87	3.29	5.96	0.00	1.00					
609	193892	Hs.116600	H16765	32.69	4.91	6.64	1.00	2.00		16.54	Larynx	Thyroid	Pancreas
615	151896	Hs.217338	H03208	37.52	0.21	175.88	7.00	0.00		487.28	Pericardial nei	Pituitary	Smooth muscle
616	183823	Hs.742	R63407	70.93	10.97	8.46	2.00	0.00		213.64	Pooled	Blood	Tonsil
624	295973	Hs.52463	N73551	21.73	2.20	9.88	12.00	0.00		541.66	Pool	LID not found	Other
629	754438	Hs.117877	A4410207	7.55	1.27	5.96	1.00	0.00		529.82			
630	120309	Hs.9600	T97215	86.73	10.60	8.18	2.00	0.00			Brain	Bone	Cervix
632	548893	Hs.33412	A4125825	9.48	0.05	162.86	14.00	0.00		278.88	Tonsil	Muscle	Spleen
646	111136	Hs.210058	T83558	48.05	7.14	8.73	2.00	0.00		484.07	Pooled	Breast	Germ Cell
648	195641	Hs.33433	R65525	18.22	1.90	9.58	6.00	0.00			Pool	LID not found	Other
653	144916	Hs.82287	R76509	24.23	4.81	5.04	0.00	1.00		252.13	Placenta	Bone	Whole embryo
655	321580	Hs.154050	W32884	22.61	3.94	5.74	0.00	1.00		185.45	Parathyroid	Foreskin	Thyroid
662	110507	Hs.160558	T82819	83.42	14.16	5.66	2.00	0.00		331.17	Epiphyse	Breast	Tonsil

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664	194587	Hs.187652	R64375	58.83	1.30	43.76	9.00	6.00	1	662.55	Pool	LID not found
672	245517	Hs.35446	N72316	31.55	0.84	37.50	14.00	0.00	6	588.46	Uterus	Eye
673	285222	Hs.36022	N91307	28.39	2.36	12.01	10.00	2.00	1	688.26	Skin	Adrenal gland
678	503737	Hs.13094	H71092	71.43	6.80	10.36	8.00	1.00	3	89.63	Pancreas	Ovary
680	610923	Hs.6518	AA131464	52.55	9.74	5.39	0.00	1.00	19	685.58	Synovial mem	Gall bladder
683	52096	Hs.74815	AA458310	34.68	0.32	5.49	2.00	0.00	1	502.94	Synovial mem Ear	
685	280750	Hs.41073	H23235	193.97	1.00	193.97	22.00	6.00	22	27.42	Thyroid	Brain
686	247783	Hs.6688	N47468	26.47	5.27	5.02	0.00	1.00	1	562.94	Prostate	Testis
687	782718	Hs.21922	N77617	20.22	2.33	8.68	6.00	0.00	1	For skin	Adiposa	Gall bladder
688	795382	Hs.8578	AA453498	53.41	9.13	5.85	1.00	0.00	1	Thyroid	Spleen	Acta
681	85097	Hs.64018	T74192	7.42	1.10	6.73	1.00	0.00	11	235.28	For skin	Lymph
695	298334	Hs.15108	N70492	8.79	0.88	9.95	5.00	4.00	1	743.24	Thyroid	Lymph
704	810843	Hs.8740	AA458859	18.18	3.03	6.00	1.00	0.00	20	231.59	Smooth muscle Bone	Pituitary
709	240318	Hs.178003	H89795	5.57	0.22	25.44	9.00	5.00	X	238.33	Small intestine	Gall bladder
710	247635	Hs.92071	N58163	39.23	5.61	109.20	7.00	5.00	3	188.24	Liver	Umbilical cord
711	324255	Hs.17466	W47350	19.74	1.73	11.41	1.00	2.00	4	555.11	Whole embryo	Blood
715	668169	Hs.82283	AA233650	9.03	0.82	11.02	6.00	3.00	3	620.47	Small intestine	Head and nec
716	809645	Hs.5011	AA454681	76.47	5.92	12.92	5.00	0.00	18	165.81	Spleen	Adrenal gland
718	138885	Hs.82145	R83894	84.73	11.17	5.78	1.00	0.00	15	243.89	Ovary	Stomach
722	20402	Hs.70704	R96941	14.41	2.27	6.36	1.00	0.00	6	164.62	Blood	Synovial mem
723	773220	Hs.100283	AA456555	16.17	2.79	5.44	0.00	2.00	10	497.42	Thyroid	CNS
724	487828	Hs.124751	AA045481	24.67	3.88	6.39	3.00	0.00	9	154.97	Skin	Stomach
727	359933	Hs.113388	AA036620	81.35	5.31	15.32	7.00	0.00	1	293.88	Hearl	Colon
731	85450	Hs.9795	T71782	13.49	2.87	5.05	0.00	1.00	11	67.01	Gall bladder	Adipose
740	810083	Hs.172824	AA454662	9.45	0.10	84.54	9.00	6.00	6	465.66	Pool	Brain
755	489025	Hs.30303	AA054757	8.48	0.89	9.51	8.00	4.00	16	130.74	Thymus	Adipose
762	814278	Hs.91728	AA455213	38.01	5.39	7.05	1.00	0.00	2	490.97	Skin	Gall bladder
765	241355	Hs.41392	H90355	36.17	8.85	5.23	1.00	0.00	8	431.76	Stomach	CNS
768	143910	Hs.183102	R78740	143.72	27.09	5.31	1.00	1.00	5	413.8	Neural	Aorta
768	795832	Hs.9070	AA481497	7.53	0.20	37.29	9.00	6.00	4	315.1	Larynx	Breast
770	755141	Hs.155191	AA411440	150.78	24.74	6.09	2.00	2.00	17	301.24	Aorta	Foreskin
772	768205	Hs.74081	AA424747	17.88	1.00	17.88	4.00	3.00	X	345.45	Bone marrow	Pool
774	47542	Hs.86948	H18454	58.00	5.83	10.47	1.00	0.00	6	820.47	Small intestine	Head and nec
782	45544	Hs.75725	H08564	199.28	1.70	117.13	4.00	1.00	18	165.81	Spleen	Adrenal gland
784	236333	Hs.102171	H82387	37.57	2.38	15.77	4.00	6.00	15	243.89	Ovary	Stomach
786	34778	Hs.73793	R19956	5.48	0.55	9.93	6.00	3.00	6	164.62	Blood	Synovial mem
787	342378	Hs.2128	W65461	18.16	2.28	7.95	1.00	1.00	10	497.42	Thyroid	CNS
790	770794	Hs.203218	AA427595	22.55	1.47	15.37	11.00	1.00	9	154.97	Skin	Stomach
794	44477	Hs.109225	H07071	55.47	1.00	55.47	10.00	5.00	1	293.88	Hearl	Colon
795	146123	Hs.78005	R79982	23.49	4.19	5.60	2.00	0.00	6	512.62	Gall bladder	Pituitary
798	161456	Hs.181082	H25546	5.22	1.00	5.22	0.00	2.00	11	67.01	Gall bladder	Adipose
803	42739	Hs.206554	R61874	140.50	14.74	9.53	4.00	0.00	6	297.81	Pool	Brain
804	31093	Hs.83984	R17717	54.84	1.77	31.91	19.00	3.00	16	465.66	Pool	Spleen
810	810445	Hs.159637	AA464470	8.26	0.34	24.05	9.00	6.00	2	130.74	Thymus	Adipose
811	352853	Hs.82843	AA019459	92.77	13.19	7.03	1.00	0.00	8	490.97	Skin	Gall bladder
816	129146	Hs.30888	R10896	80.28	6.04	13.30	7.00	0.00	2	130.74	Thymus	Adipose
818	612965	Hs.78070	AA464600	92.82	7.58	12.20	4.00	0.00	8	490.97	Skin	Gall bladder
820	767765	Hs.79022	AA418077	17.40	2.97	5.99	1.00	0.00	8	431.76	Stomach	CNS
823	666639	Hs.197260	AA233339	20.59	0.00	2059472.73	14.00	0.00	5	413.8	Neural	Aorta
824	809494	Hs.75564	AA486153	138.63	22.71	6.11	2.00	0.00	4	315.1	Larynx	Breast
826	285090	Hs.163295	N20798	88.48	11.45	7.73	1.00	0.00	4	315.1	Larynx	Breast
832	768497	Hs.16630	AA469885	6.07	1.00	6.07	0.00	1.00	17	301.24	Aorta	Foreskin
834	280303	Hs.85146	H95235	27.97	1.51	18.47	1.00	1.00	17	301.24	Aorta	Foreskin
835	390245	Hs.1880	AA047803	7.73	0.31	24.66	9.00	6.00	4	315.1	Larynx	Breast
840	300590	Hs.153984	N80741	57.77	6.17	9.38	3.00	0.00	X	345.45	Bone marrow	Pool
844	209137	Hs.199216	H83934	5.84	1.00	5.84	0.00	1.00	X	345.45	Bone marrow	Pool

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Table 3A

850	345539	Hs.71816	W77811	18.91	3.51	5.35	2.00	1.00	14	276.5	Adipose	Stomach	Ovary
856	764479	Hs.76470	A410587	10.24	1.78	5.76	0.00	1.00	1	191.81	Adipose	Skin	Stomach
865	232612	Hs.5822	H73420	29.92	5.03	5.95	1.00	0.00	18	395.44	Gall bladder	Bone	Adipose
866	798646	Hs.75212	AA460115	110.46	10.26	10.77	4.00	1.00	2	39.71	Cervix	Esophagus	Synovial membrane
868	51666	Hs.77929	H20908	26.48	3.23	8.20	2.00	0.00	2	458.61	Synovial mem	Adipose	Lymph
869	261519	Hs.50029	H86636	8.39	1.00	8.39	1.00	1.00	20	283.4			
871	144777	Hs.15318	R75263	48.30	8.47	5.70	1.00	0.00	1	539.01	Synovial mem	Adrenal gland	Gall bladder
873	184175	Hs.76040	H27912	28.71	0.55	53.78	9.00	6.00	19	255.34	Synovial mem	Stomach	Placenta
874	768696	Hs.75485	AA460619	61.29	11.80	7.01	1.00	0.00	10	532.98	Small intestine	Adipose	Bone
876	365641	Hs.82741	AA025937	12.92	1.82	6.72	1.00	0.00	10	766.87	Bone marrow	CNS	Lymph
877	65327	Hs.2259	T68800	15.32	2.87	5.34	2.00	0.00	11	380.71	Lymph	Pool	LID not found
878	75923	Hs.78765	T47229	32.41	2.88	12.10	1.00	5.00	10	270.14	Parathyroid	Breast	CNS
879	664940	Hs.204153	AA252318	37.03	5.88	6.55	3.00	0.00	3	210.13			
882	81518	Hs.181080	T63668	15.94	0.00	1594480.00	14.00	0.00	X	308.76	Cervix	Uterus	Stomach
883	592498	Hs.171409	AA161465	31.85	5.20	6.09	2.00	0.00	1	755.69	Ear	Pooled	CNS
884	842849	Hs.61942	AA486289	68.60	11.34	6.05	1.00	0.00	11	240.15	Cervix	Skin	Adrenal gland
887	814117	Hs.5122	AA465386	58.38	8.08	7.37	3.00	0.00	10	382.35	Smooth musc	Stomach	Thyroid
893	243816	Hs.75611	N39181	6.10	1.00	6.10	0.00	2.00	7	448.88	Adipose	Spleen	Placenta
895	828350	Hs.77198	AA521025	16.75	0.23	72.19	9.00	6.00	5	531.66	Gall bladder	Adipose	Breast
897	35826	Hs.799	R14693	50.48	2.04	24.80	20.00	4.00	5	689.77	Peripheral ner	Umbilical cord	Placenta
901	770856	Hs.85289	AA434483	14.54	2.94	5.51	0.00	1.00	1	31.92	Thymus	Prostate	Heart
909	265974	Hs.164771	N20196	5.40	0.12	44.85	7.00	2.00	19	86.49	Parathyroid	Pooled	Germ Cell
911	785743	Hs.264	AA449878	31.70	5.84	5.43	2.00	0.00	X	263.06	Umbilical cord	Omentum	Thyroid
912	897590	Hs.180946	AA466338	834.42	180.31	5.18	1.00	0.00	1	73.06	Muscle	Cervix	Heart
913	23776	Hs.75438	R38198	33.96	2.80	13.06	2.00	0.00	4	545.05	Lymph node	Adipose	Synovial membrane
917	123926	Hs.83942	R01515	18.79	1.55	12.77	8.00	4.00	1	487.75			
920	172440	Hs.173206	H20138	32.12	3.57	9.00	4.00	0.00	2	526.78	Head and nec	Adrenal gland	Stomach
921	813848	Hs.74635	AA436979	67.75	13.31	5.09	1.00	0.00	7	714.07	Head and nec	Thyroid	Eye
922	784278	Hs.77617	AA447481	75.90	5.04	15.02	2.00	1.00	2	17.79	Cervix	Placenta	Skin
924	753862	Hs.41072	AA410517	1172.13	115.62	10.14	1.00	0.00	6	501.76	Thymus	Nose	Cervix
928	950445	Hs.91773	AA592082	149.63	21.77	8.87	5.00	0.00	5	152.58	Liver	Pool	Germ Cell
929	198982	Hs.201987	R03124	40.11	5.00	8.02	4.00	0.00	21	489.04	Testis	Placenta	Breast
932	842860	Hs.173936	AA486393	121.13	23.09	5.25	1.00	0.00	12	583.64	Head and nec	Muscle	Ovary
933	211548	Hs.73858	H61449	5.14	0.88	36.35	21.00	5.00	8	747.96	Whole embryo	Cervix	Stomach
938	150466	Hs.166373	H01039	65.97	1.82	5.06	1.00	0.00	2	64.01	Adrenal gland	Thyroid	CNS
940	813530	Hs.210766	AA447774	40.44	7.99	10.54	7.00	2.00	18	111.22	Nose	Gall bladder	Bone
945	810156	Hs.76006	AA464387	6.21	0.78	10.54	7.00	2.00	10	403.27	Adrenal gland	Bone	Ear
946	37045	Hs.169266	R19478	5.20	0.94	5.64	3.00	2.00	15	198.24	Head and nec	Aorta	Placenta
947	79353	Hs.3382	T62804	15.40	2.28	8.78	1.00	0.00	5	582.6	Peripheral ner	Head and nec	Nose
948	40017	Hs.897	R52654	165.04	25.09	7.37	3.00	0.00	9	357.99	Eye	Pool	LID not found
950	897670	Hs.84776	AA496600	24.48	0.18	134.08	9.00	8.00	3	355.78	Placenta	Skin	Adipose
958	814896	Hs.168075	AA481087	51.54	5.28	9.79	2.00	0.00	9	291.14	Breast	Colon	Whole embryo
959	795738	Hs.79126	AA460286	103.77	9.53	10.89	1.00	0.00	19	174.17	Breast	Pool	LID not found
960	135083	Hs.110028	R33030	241.56	43.10	5.61	2.00	0.00	8	87.95	Muscle	Tonsil	Colon
961	111204	Hs.193780	T84382	58.91	8.78	5.80	1.00	0.00	10	489.05	Prostate	Eye	Forebrain
966	546800	Hs.41693	AA084517	22.77	4.12	5.53	1.00	1.00	17	372.99			
968	140337	Hs.179796	R67000	9.86	0.73	13.44	8.00	5.00	1	114.04	Breast	LID not found	Other
969	244205	Hs.32002	N52980	30.49	3.87	7.87	3.00	0.00	7	214.37	Smooth musc	Cervix	Tonsil
974	68400	Hs.129691	T65930	88.31	14.41	8.13	1.00	0.00	9	150.73	Placenta	Whole embryo	Bone
976	154214	Hs.25560	R61948	25.81	0.37	69.03	14.00	0.00	2	Colo			
981	142259	Hs.182238	R70518	30.16	3.49	8.64	0.00	2.00	4	489.05	Prostate	Eye	Forebrain
989	195456	Hs.15617	R91710	27.12	2.18	12.55	2.00	0.00	1	114.04	Breast	LID not found	Other
991	122384	Hs.203358	T99145	47.05	6.43	7.32	2.00	0.00	7	214.37	Smooth musc	Cervix	Tonsil
992	154289	Hs.25392	AA023884	134.84	2.95	45.78	11.00	3.00	9	150.73	Placenta	Whole embryo	Bone
1000	470232	Hs.25894	R26324	16.77	2.12	7.93	4.00	0.00	9	Colo			
1004	133096	Hs.77889	H25214	8.14	1.00	9.14	4.00	2.00					

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Table 3A

1013	201207	Hs.35152	R99288	37.43	8.13	8.11	2.00	0.00	12	370.32	Umbilical cord	Pool	U/LD not found	Other	Synovial membrane
1019	641691	Hs.78935	AA487589	101.20	15.02	6.74	1.00	0.00			Brain	Pool	U/LD not found		
1021	244329	Hs.184264	N75729	35.06	5.90	5.84	2.00	0.00			Larynx	Pool	Adipose	Skin	
1023	212634	Hs.176940	H59046	59.04	11.50	5.14	1.00	0.00	X	83.98	Ear	Pool	Whole embryo		
1028	133303	Hs.27695	R26977	55.01	5.16	10.65	4.00	2.00	3	187.02	Ear	Pool			
1029	110980	Hs.189742	T60360	43.18	2.92	14.77	3.00	0.00			Aorta	Cervix	Adrenal gland		
1032	138141	Hs.169400	R53681	17.16	2.97	5.79	1.00	0.00	X	245.06	Placenta	U/LD not found	Other		
1040	138165	Hs.204336	R53900	61.67	3.31	18.64	9.00	6.00			Pool	U/LD not found	Other		
1041	127076	Hs.188626	R07998	17.84	0.89	19.95	7.00	0.00	16	362.95	Ear	Tonsil	Ovary		
1053	66792	Hs.8552	T84938	47.23	5.09	9.29	2.00	0.00	17	429.02	Pool	U/LD not found	Other		
1057	245413	Hs.35100	N77203	27.09	1.10	23.41	13.00	0.00			Pool	U/LD not found	Other		
1062	268169	Hs.183666	W02639	16.88	2.41	7.05	2.00	0.00			Pool	U/LD not found	Other		
1085	197051	Hs.174321	R93153	57.66	5.45	10.62	2.00	3.00	1	667.01	Cervix	Ear	Bone		
1072	413215	Hs.3298	W65063	29.19	1.95	15.00	3.00	0.00	14	135.79	Pool	U/LD not found	Other		
1074	243556	Hs.207864	N77223	55.16	7.74	7.13	2.00	0.00	2	467.75	Pool	U/LD not found	Other		
1079	172440	Hs.173206	H20138	45.38	3.99	11.39	4.00	0.00	12	473.2	Pool	U/LD not found	Other		
1081	230637	Hs.204150	H75480	18.96	2.21	8.58	5.00	2.00	12	247.44	Aorta	Lymph	Cervix		
1091	130610	Hs.8752	R22459	15.65	1.59	9.88	1.00	0.00			Smooth muscle	Thyroid	Lymph		
1095	180802	Hs.21247	R87777	8.44	1.00	8.44	5.00	0.00	8	334.17	Pool	U/LD not found	Other		
1123	208959	Hs.101150	H51003	46.48	7.49	6.20	3.00	0.00	5	576.78	Thymus	Blood	Heart		
1126	295321	Hs.50689	W04369	18.15	3.28	5.57	1.00	0.00	11	41.44	Lymph	Heart	Heart		
1127	195282	Hs.174142	R92609	0.44	1.00	0.44	0.00	5.00	12	444.45	Neural	Nose	Esophagus		
1128	246849	Hs.169382	H97000	13.90	0.10	139.04	6.00	6.00	14	101.95	Smooth muscle	Tonsil	Lymph		
1130	246144	Hs.47914	N55492	24.28	3.75	6.48	2.00	0.00	10	187.91	Umbilical cord	Small intestine	Gall bladder		
1134	297212	Hs.188543	W03754	86.02	1.00	86.02	23.00	6.00	3	164.64	Pool	Gall bladder	Eye		
1150	300666	Hs.118050	W07690	5.20	0.62	8.43	5.00	2.00	6	501.76	Pool	Stomach	CNS		
1154	347773	Hs.83972	R45055	26.43	1.59	16.67	11.00	0.00	5	591.55	Umbilical cord	Breast	Cervix		
1156	121621	Hs.103804	T97593	114.59	10.69	10.72	3.00	0.00	5	287.46	Pancreas	Lymph			
1158	347271	Hs.169079	W68291	14.05	0.68	20.41	6.00	6.00	5	480.32	Cervix	Stomach	Lung		
1159	282806	Hs.204062	N69204	25.72	2.22	11.59	8.00	0.00	16	728.84	Thyroid	Placenta	Uterus		
1166	343072	Hs.14467	W67174	764.58	7.58	100.88	20.00	2.00	7	453.79	Head and nec	Cervix	CNS		
1167	230271	Hs.87837	H94897	82.72	10.79	7.67	3.00	1.00	16	405.01	Lymph node	Thymus	Colon		
1170	770027	Hs.173902	AA427688	55.95	7.93	7.06	0.00	1.00	2	668.45	Liver	Prostate	Codon		
1172	669443	Hs.156185	AA250730	13.03	0.66	19.61	14.00	0.00	12	397.89	Ear	Prostate	Spleen		
1178	769657	Hs.81585	AA428749	9.03	1.00	9.03	4.00	1.00	4	71.55	Gall bladder	Prostate	Eye		
1182	811740	Hs.1142	AA463510	124.44	3.44	36.22	20.00	4.00			Ignore	Head and nec	Germ Cell		
1184	563444	Hs.195880	AA412860	224.35	31.85	7.04	0.00	1.00			Pancreas	Stomach	Breast		
1188	193383	Hs.4934	H48097	114.28	7.81	14.64	6.00	3.00	2	607.98	Eye	Lymph	Testis		
1192	753215	Hs.203862	AA408420	34.15	3.52	9.71	5.00	0.00	7	715.71	Thyroid	Tonsil	Prostate		
1194	69977	Hs.9661	T53775	19.47	1.00	19.47	1.00	2.00	1	554.6	Bone marrow	Head and nec	Forekin		
1195	41541	Hs.198079	R52789	44.90	8.46	5.31	1.00	0.00	16	61.77	Larynx	Synovial mem	Pancreas		
1202	244169	Hs.1915	N52474	10.02	1.32	7.58	3.00	1.00	X	277.53	Ear	Uterus	Whole embryo		
1206	233721	Hs.194801	H78047	115.33	1.00	115.33	0.00	3.00	11	22.62	Skin	Uterus	Ovary		
1222	813179	Hs.85112	AA456321	13.08	1.00	13.08	0.00	2.00	3	210.76	Epididymis	Aorta	Gall bladder		
1227	245970	Hs.169998	N52293	107.40	15.07	7.13	2.00	0.00	1	557.95	Adipose	Germ Cell	Aorta		
1228	295729	Hs.18426	W02265	15.92	2.37	6.70	1.00	0.00			Gall bladder	Adipose	Forekin		
1231	265680	Hs.199112	N31467	26.17	1.65	15.88	3.00	2.00			Ignore	Head and nec	Germ Cell		
1235	823851	Hs.18397	AA490462	83.92	3.54	23.67	3.00	4.00			Pancreas	Stomach	Breast		
1236	740027	Hs.98247	AA477514	87.23	0.11	816.14	9.00	6.00	2		Eye	Lymph	Testis		
1238	180803	Hs.32209	H52141	7.56	0.24	31.04	5.00	8.00			Prostate	CNS	Prostate		
1246	276091	Hs.78077	R94153	6.37	1.00	6.37	0.00	1.00	2		Prostate	CNS	Prostate		
1247	110467	Hs.139851	T88381	86.60	2.22	39.02	17.00	2.00	1		Prostate	CNS	Prostate		
1248	840768	Hs.16198	AA456136	19.56	0.10	195.54	9.00	6.00	7		Bone marrow	Head and nec	Forekin		
1251	786607	Hs.95243	AA451669	48.44	2.13	22.73	8.00	4.00	16		Larynx	Synovial mem	Pancreas		
1253	165195	Hs.15108	R88242	14.71	0.10	147.10	7.00	6.00	X		Ear	Uterus	Whole embryo		
1256	144977	Hs.92384	R78725	121.27	17.60	6.89	1.00	2.00	11		Skin	Uterus	Ovary		
1257	77133	Hs.51912	T50633	74.73	7.72	9.56	5.00	0.00	3		Epididymis	Aorta	Gall bladder		

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1260	71577	Hs.155210	T58932	5.10	1.00	5.10	0.00	1.00	2	98.8	Skin	Liver	Pancreas
1261	840493	Hs.76224	AA467797	37.99	3.70	10.27	0.00	4.00	1	538.34	Stomach	Adipose	Breast
1266	713782	Hs.93226	AA282678	12.27	0.27	45.29	9.00	6.00	7	523.34	Small intestine	Pancreas	Pooled
1267	80436	Hs.80475	AA460830	113.30	13.87	8.17	0.00	3.00	4	623.42	Smooth muscle	Blood	Muscle
1269	80946	Hs.12013	T70122	101.51	10.12	10.03	4.00	0.00	19	216	Stomach	Tonsil	Pooled
1271	829478	Hs.75471	AA504351	46.90	8.77	5.35	1.00	0.00	20	235.87	Larynx	Skin	Germ Cell
1273	819528	Hs.17718	AA456878	18.85	3.04	6.21	1.00	0.00	12	227.72	Cervix	Thyroid	Pancreas
1274	843321	Hs.23881	AA469569	526.16	32.07	16.41	8.00	1.00	4	930.67	Ear	Uterus	Aorta
1276	762855	Hs.76252	AA452627	19.08	1.65	11.34	12.00	2.00	14	3.89	Liver	Whole embryo	Prostate
1277	81417	Hs.169617	T60223	47.68	4.24	11.23	9.00	2.00	14	190.03	Bone marrow	Small intestine	Neural
1280	530662	Hs.203603	AA071121	5.42	1.00	5.42	2.00	5.00	14	253.29	Aorta	Colon	Brain
1283	841263	Hs.78690	AA487149	30.54	5.67	5.39	1.00	0.00	11	506.5	Larynx	Adipose	Stomach
1284	129392	Hs.14537	R11236	6.46	0.34	16.89	6.00	0.00	2	Umbilical cord			CNS
1285	764593	Hs.6858	AA443302	119.85	8.17	14.88	5.00	1.00	3	512.91	Pool	LID not found	Other
1288	765070	Hs.109276	W47077	114.61	8.65	12.95	5.00	2.00	19	250.6			
1292	199231	Hs.35480	R95760	18.05	1.68	10.84	3.00	0.00	16	398.99	Neural	Forebrain	Parathyroid
1294	526184	Hs.164627	AA076645	170.82	14.24	12.00	4.00	2.00	12	25.02	Peripheral ner	Cervix	Colon
1295	811870	Hs.194625	AA454959	135.64	23.75	5.71	3.00	0.00	5	580.59	Ignore	Smooth muscle	Synovial membrane
1299	897087	Hs.75227	AA598884	14.14	0.55	25.71	9.00	1.00	2	111.03	Peripheral ner	Pancreas	Aorta
1302	80604	Hs.109281	T64626	76.39	12.79	5.97	9.00	1.00	17	477.78	Neural	Gall bladder	CNS
1311	786334	Hs.3254	AA453015	114.25	11.30	10.11	4.00	1.00	13	149.23	Ear	Pancreas	Pancreas
1312	141845	Hs.19260	R70901	102.68	4.05	25.37	14.00	1.00	6	620.93	Stomach	Spleen	Prostate
1313	714108	Hs.77274	AA284668	102.68	4.05	25.37	14.00	1.00	16	44.94	Ignore	Synovial men	Adipose
1314	897563	Hs.183246	AA489609	89.81	10.43	8.61	7.00	0.00	3	340.31	Eye	Forebrain	Pool
1324	137236	Hs.103329	R36431	25.87	5.05	5.12	2.00	0.00	1	168.22	Pooled	CNS	Pancreas
1325	809394	Hs.174130	AA456585	233.32	7.89	29.57	9.00	6.00	22	115.14	Lymph node	Head and nec	Lymph
1326	896095	Hs.1119	AA598902	15.88	0.50	31.84	9.00	6.00	7	588.48	Bone marrow	Forebrain	Neural
1329	841282	Hs.84285	AA487197	7.42	0.09	78.35	6.00	3.00	1	72.78	Epiphyse	Esophagus	Skin
1330	263200	Hs.153445	H98544	17.89	2.80	6.38	6.00	0.00	11	387.45	Gall bladder	Cervix	Eye
1332	246749	Hs.93560	N59738	37.77	6.07	5.65	1.00	0.00	15	210.86	Skin	Heart	Whole embryo
1333	871332	Hs.173466	AA521232	137.82	1.00	137.82	7.00	3.00	X	358.28	Nose	Bone	Pancreas
1337	882354	Hs.28505	AA520978	63.13	11.43	7.28	3.00	0.00	12	385.98	Pool	Brain	LID not found
1338	893363	Hs.78307	AA598930	60.04	0.55	109.17	9.00	6.00	1	583.09	Stomach	Bone	Pancreas
1341	740554	Hs.203914	AA477165	82.29	5.92	13.90	2.00	0.00	1	594.95	Adipose	Bone	LID not found
1342	342840	Hs.81892	W88270	35.68	6.38	5.59	2.00	0.00	18	299.63	Spleen	Germ Cell	Pancreas
1345	244147	Hs.821	N51018	13.92	0.10	139.20	9.00	6.00	11	339.45	Pool	LID not found	Other
1352	194858	Hs.200104	R64407	108.88	5.28	20.80	3.00	1.00	19	73.91	Pool	LID not found	Other
1353	240694	Hs.167787	H78134	49.08	1.78	27.34	16.00	1.00	11	292.28	Thyroid	Parathyroid	Whole embryo
1356	140301	Hs.28782	R68924	17.17	1.81	8.99	7.00	0.00	2	213.26	Pool	LID not found	Other
1360	214658	Hs.33565	H74032	142.25	2.33	60.96	9.00	6.00	2	594.95	Adipose	Bone	LID not found
1361	292515	Hs.21263	N88485	195.62	7.14	27.40	17.00	2.00	1	712.76	Pool	Lymph	Pancreas
1365	125788	Hs.8739	R07684	56.28	10.51	5.35	1.00	0.00	1	225.9	Pool	LID not found	Other
1373	195558	Hs.124698	R87516	34.76	6.12	5.64	1.00	2.00	21	61.8	Pool	LID not found	Other
1374	110562	Hs.13061	T90074	17.03	3.09	5.78	2.00	0.00	18	572.48	Larynx	Head and nec	Parathyroid
1384	206949	Hs.177258	R86738	5.57	1.00	5.57	0.00	1.00	13	85.51	Pancreas	Pool	LID not found
1386	108351	Hs.13781	T70612	29.53	3.85	7.87	0.00	2.00	2	75.89			
1388	137760	Hs.186530	R68514	74.75	11.00	6.78	2.00	1.00	1	213.26	Pool	LID not found	Other
1400	242010	Hs.187523	H93819	27.74	1.77	15.65	14.00	0.00	1	712.76	Pool	Lymph	Pancreas
1403	126722	Hs.19875	R07068	18.01	2.63	6.09	2.00	0.00	1	225.9	Pool	LID not found	Other
1404	137797	Hs.203316	R88245	72.84	3.16	22.97	9.00	6.00	1	61.8	Pool	LID not found	Other
1410	110188	Hs.13820	T71382	10.45	1.77	5.90	0.00	1.00	18	572.48	Larynx	Head and nec	Parathyroid
1418	110282	Hs.13862	T81988	21.87	2.79	7.85	1.00	0.00	13	85.51	Pancreas	Pool	LID not found
1422	110987	Hs.6455	T90368	111.54	10.65	10.47	3.00	0.00	2	75.89			
1424	193481	Hs.18843	H47297	18.67	2.83	8.71	1.00	1.00	1	213.26	Pool	LID not found	Other
1425	144926	Hs.110685	R78514	133.20	23.60	5.64	1.00	0.00	1	213.26	Pool	LID not found	Other
1428	137685	Hs.159797	R85381	13.71	2.47	6.37	2.00	0.00	1	213.26	Pool	LID not found	Other
1440	193546	Hs.177861	H47450	11.79	1.99	5.92	2.00	0.00	2	75.89			

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1443	321773	Hs.55548	H03105	12.58	0.18	65.11	1.00	3.00	3	222.62	Pool	Prostate	LID not found
1445	241475	Hs.41407	H90477	36.66	5.66	6.46	2.00	0.00	17	347.35	Brain	Whole embryo	Pool
1450	241761	Hs.13562	N58144	24.51	3.25	7.55	3.00	0.00	17	231.83	Smooth muscle	Bone	Blood
1451	327245	Hs.26706	AA284291	26.54	5.52	5.17	0.00	1.00	2	500.36	Pool	LID not found	Other
1453	241497	Hs.41410	H90490	36.28	5.57	6.87	2.00	0.00	5	148.71	Brain	Pool	LID not found
1454	292542	Hs.92571	N91317	34.54	2.28	15.18	13.00	0.00	15	425.83	Ear	Thyroid	Thyroid
1458	244637	Hs.75847	N54914	213.58	41.55	5.14	1.00	0.00	6	337.94	Placenta	Brain	Lymph
1460	795442	Hs.5400	AA435314	6.04	0.33	20.86	6.00	5.00	11	370.09	Heart	Kidney	Forebrain
1462	135549	Hs.92576	R25901	12.07	1.01	12.00	4.00	0.00	11	123.61	Neural	Adipose	Gall bladder
1467	418185	Hs.98413	W90522	6.74	0.53	12.78	3.00	0.00	18	84.58	Bone	Adrenal gland	Muscle
1468	370767	Hs.94785	W70352	36.55	0.10	36.51	9.00	8.00	8	475.65	Peripheral nerve	Testis	Blood
1480	289442	Hs.77135	W05442	27.18	4.81	5.90	1.00	0.00	14	437.82	Smooth muscle	Gall bladder	Uterus
1491	429466	Hs.6133	AA007532	18.00	2.51	5.00	1.00	0.00	3	239.18	Peripheral nerve	Thymus	Thyroid
1494	753381	Hs.92982	AA408332	26.88	5.37	5.00	3.00	0.00	13	74.81	Lymph node	Adrenal gland	Forebrain
1496	765603	Hs.109706	AA459855	106.85	18.84	5.87	3.00	0.00	15	193	Prostate	LID not found	Other
1498	126341	Hs.77310	R08438	14.01	0.37	37.85	9.00	6.00	7	638.71	Whole embryo	Heart	Pool
1503	609603	Hs.182371	AA458483	276.70	0.38	763.09	8.00	5.00	11	271.39	Muscle	Acrotia	Whole embryo
1510	295510	Hs.205260	N95574	40.34	4.05	9.96	5.00	5.00	3	474.08	Kidney	Prostate	Uterus
1511	610510	Hs.44317	AA484531	88.22	16.18	5.45	1.00	0.00	18	281.03	Lymph node	Synovial membrane	Spleen
1517	241677	Hs.41514	H91631	5.88	0.66	8.51	7.00	5.00	13	99.09	Pool	Placenta	Testis
1524	261623	Hs.5884	N87822	9.16	1.77	5.18	1.00	0.00	21	150.39	Muscle	Thyroid	CNS
1528	811028	Hs.9848	AA485373	69.42	8.17	8.50	2.00	2.00	9	416.74	Unilateral cord	Thyroid	Lymph
1533	246276	Hs.167839	N54803	122.59	14.83	8.27	0.00	0.00	7	682.13	Ear	Liver	CNS
1534	163811	Hs.41656	N77086	66.29	11.80	5.82	1.00	0.00	14	37.19	Head and neck	Cervix	Stomach
1538	629529	Hs.101337	AA192553	11.41	2.18	5.22	1.00	0.00	19	35.68	Smooth muscle	Tonsil	Brain
1539	484641	Hs.83874	AA037014	5.30	0.39	13.56	4.00	5.00	7	526.17	Unilateral cord	Brain	Blood
1542	609578	Hs.76184	AA456616	950.04	105.49	9.04	6.00	1.00	13	82.3	Muscle	Muscle	Unilateral cord
1545	49344	Hs.203928	H15077	6.45	0.42	15.20	4.00	0.00	X	353.25	Forebrain	Tonsil	Muscle
1546	180520	Hs.180886	R85213	73.54	13.56	5.42	1.00	0.00	17	307.17	Unilateral cord	Larynx	Lymph node
1550	15981	Hs.99858	R23421	410.21	57.07	7.33	1.00	0.00	9	417.73	Skin	Gall bladder	Forebrain
1552	207268	Hs.50205	H59920	8.33	0.30	22.65	3.00	2.00	X	351.05	Synovial membrane	Larynx	Skin
1554	49464	Hs.78853	H15111	11.38	1.00	11.35	7.00	6.00	20	209.08	Forebrain	Blood	Lymph
1559	757381	Hs.98938	AA437139	7.79	1.00	7.79	0.00	1.00	3	448.88	Larynx	Germ cell	Parathyroid
1562	212021	Hs.76800	H68509	17.54	2.42	7.25	1.00	0.00	12	247.42	Esophagus	Synovial membrane	Stomach
1564	123400	Hs.91142	T99439	19.25	0.40	48.57	9.00	6.00	11	228.86	Eye	Bone	Breast
1567	35271	Hs.76712	R25521	12.28	1.00	12.26	1.00	3.00	12	471.01	Acrotia	Head and neck	Thymus
1574	810617	Hs.184108	AA484034	1120.62	153.53	7.30	3.00	0.00	22	98.32	Thymus	Adrenal gland	Gall bladder
1578	289978	Hs.76480	N64628	20.07	0.17	120.16	9.00	6.00	4	371.2	Muscle	Cervix	Whole embryo
1580	813827	Hs.82143	AA453714	8.17	0.10	81.71	9.00	6.00	1	326.23			
1582	640101	Hs.75879	AA083577	474.69	63.25	7.50	1.00	0.00	9				
1586	51328	Hs.76832	H20743	69.84	0.12	582.57	9.00	6.00	7				
1587	193372	Hs.25156	R94222	6.81	0.43	15.96	9.00	6.00	X				
1590	123117	Hs.118778	T98559	18.32	2.83	6.55	0.00	1.00	20				
1594	66686	Hs.26787	T67270	1298.38	229.93	5.65	1.00	0.00	3				
1598	246856	Hs.200542	H84048	6.81	0.10	68.12	7.00	6.00	12				
1602	25499	Hs.73818	R11638	23.42	0.55	42.59	5.00	0.00	11				
1603	770880	Hs.102497	AA430573	84.47	10.48	8.05	0.00	1.00	11				
1604	754538	Hs.118724	AA406285	133.01	17.25	7.71	5.00	0.00	12				
1606	223098	Hs.196692	H84113	48.32	4.42	10.92	3.00	1.00	12				
1614	810502	Hs.31638	AA458868	24.03	4.32	5.56	1.00	0.00	1				
1622	26616	Hs.79411	R39891	91.67	9.44	6.53	2.00	0.00	22				
1626	292986	Hs.75544	N06830	149.81	26.69	5.62	2.00	0.00	4				
1633	43198	Hs.188479	H12903	13.82	1.19	11.66	5.00	0.00	1				
1634	539523	Hs.98855	AA304882	103.66	8.54	12.14	15.00	1.00	9				
1639	781766	Hs.76331	AA431878	17.97	2.65	6.66	2.00	0.00					

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1639	739126	Hs.76801	AA421687	11.49	1.29	8.94	1.00	0.00	12	Synovial mem	Blood	Colon
1841	45291	Hs.169488	H086542	147.58	24.70	5.98	0.00	1.00	12	Adrenal gland	Testis	
1844	782760	Hs.154654	AA448157	106.47	2.49	42.81	13.00	5.00	2	Smooth musc	Fore skin	Ear
1848	897982	Hs.4935	AA598663	34.56	0.85	40.59	9.00	6.00	12	Cervix	Synovial mem	Marrow
1849	510879	Hs.76152	AA099394	6.22	0.78	8.16	4.00	2.00	12	Aorta	Omentum	Gall bladder
1852	949938	Hs.135084	AA599177	222.88	37.85	5.89	0.00	1.00	20	Peripheral nervous system	Adipose	
1853	241474	Hs.184143	H90415	98.14	8.53	7.99	1.00	0.00	17	Adrenal gland	Muscle	Cervix
1854	843249	Hs.107474	AA480645	46.74	5.91	8.05	3.00	0.00	2	Prostate	Liver	
1856	824340	Hs.1583	AA480666	13.20	0.05	283.36	9.00	6.00	19	Tonsil	Blood	Lymph
1857	128126	Hs.1369	R09581	64.29	7.50	8.57	1.00	0.00	1	684.72 Cervix	Placenta	Stomach
1860	755295	Hs.514	AA454148	49.85	8.05	6.19	2.00	0.00	4	Adipose	Ear	
1863	754538	Hs.118724	AA421977	140.04	15.82	6.79	9.00	0.00	11	247.42 Esophagus	Lymph	Ovary
1864	297292	Hs.94360	N80128	382.06	7.54	51.98	7.00	3.00	1	Muscle	Synovial mem	Skin
1868	774751	Hs.1565	AA42095	20.34	1.81	11.23	7.00	0.00	15	Stomach	Aorta	Whole embryo
1868	814776	Hs.63572	AA486603	109.76	18.69	5.87	3.00	0.00	1	Smooth musc	Thyroid	
1868	841641	Hs.56023	AA487700	134.93	11.33	11.33	6.00	0.00	11	Lymph node	Pancreas	-
1869	868851	Hs.56023	AA282888	31.43	4.39	7.16	6.00	0.00	15	Thyroid	-	Germ Cell
1873	33926	Hs.3446	R19938	103.74	8.16	12.72	6.00	0.00	15	Thymus	Synovial membrane	
1874	810659	Hs.943	AA458855	63.93	3.23	19.76	1.00	4.00	15	Trachea	Aorta	
1876	850690	Hs.85137	AA608568	64.07	3.20	16.87	7.00	0.00	15	Lymph	Tonsil	Germ Cell
1879	814465	Hs.210804	AA459266	6.59	0.42	16.75	9.00	6.00	7	Gall bladder	Uterus	Whole embryo
1882	814615	Hs.154672	AA480995	76.77	9.11	8.43	3.00	0.00	X	Adipose	Lymph	Adrenal gland
1895	144788	Hs.821	R77226	12.47	0.19	65.77	9.00	6.00	6	Nostril	Testis	Pituitary
1891	358162	Hs.23642	V95346	6.38	1.00	6.38	1.00	0.00	X	Germ Cell	Bone	Pancreas
1893	184384	Hs.101025	R63000	446.55	49.55	9.01	1.00	0.00	11	Larynx	Head and neck	
1894	770468	Hs.159223	AA434487	9.38	1.00	9.38	4.00	2.00	12	Synovial mem	Thyroid	Parathyroid
1897	810037	Hs.1139	AA485019	179.88	14.65	12.11	1.00	0.00	11	63.22	Pancreas	
1899	813542	Hs.76391	AA459686	21.58	2.24	9.64	0.00	2.00	21	217.43 Aorta	Fore skin	
1701	768168	Hs.6101	AA424833	10.20	1.00	10.20	0.00	1.00	6	39.19 Umbilical cord	Cervix	Esophagus
1705	28811	Hs.160930	R14027	21.16	3.49	6.07	4.00	0.00	5	387.41 Stomach	Tonsil	Testis
1706	840865	Hs.75607	AA482328	111.73	13.44	8.32	3.00	1.00	8	485.38 Smooth musc	Placenta	Ear
1716	898092	Hs.75511	AA598794	177.33	13.39	13.24	7.00	1.00	6	528.46 Bone	Ear	
1723	774071	Hs.7685	AA442040	178.89	28.20	6.83	4.00	0.00	11	299.09 Bone marrow	Smooth musc	Bone
1725	132373	Hs.64025	R26526	30.34	0.86	31.02	20.00	2.00	18	Placenta	Pool	Testis
1728	81599	Hs.75981	T66018	76.34	13.07	5.84	2.00	0.00	18	-6.61 Skin	Lymph	Adipose
1736	233547	Hs.44053	H78358	8.92	1.27	7.80	1.00	0.00	4	211.81 Tonsil	Prostate	Aorta
1739	120634	Hs.17628	T65234	109.50	2.62	4.72	3.00	1.00	4	Lung	Pool	LID not found
1741	124719	Hs.185030	R02168	55.90	8.80	8.21	2.00	0.00	21	Cervix	Pool	LID not found
1742	144797	Hs.8230	R76553	44.71	5.72	7.61	0.00	1.00	21	Smooth musc	Stomach	Uterus
1747	120031	Hs.17329	T65236	64.98	10.11	6.43	2.00	0.00	4	Pool	LID not found	Other
1748	335375	Hs.24182	V652186	15.18	2.87	6.28	1.00	1.00	4	557.16 Uterus	Breast	Prostate
1750	121577	Hs.8261	T87825	11.86	1.92	6.17	0.00	1.00	4	34.83 Stomach	Germ Cell	Fore skin
1760	205715	Hs.28402	H59381	20.63	1.94	10.64	9.00	0.00	9	219.65 Breast	Pool	Whole embryo
1766	138059	Hs.153472	R52634	19.47	2.68	7.26	1.00	1.00	1	237.47 Placenta	Colon	LID not found
1768	154789	Hs.184110	R55408	60.85	2.47	24.80	5.00	5.00	X	245.06 Brain	LID not found	Other
1776	154785	Hs.28438	R55640	12.58	2.03	6.20	6.00	0.00	15	83.4 Breast	LID not found	Other
1781	295283	Hs.191742	V04411	16.87	2.77	5.99	2.00	0.00	6	271.39 Pool	LID not found	Other
1785	292207	Hs.49455	N80622	75.72	4.64	16.33	3.00	0.00	11	Pool	LID not found	Other
1788	133534	Hs.87013	R32665	13.37	2.46	5.43	1.00	2.00	12	130.31		
1793	113488	Hs.184407	T78084	13.81	1.02	13.58	7.00	1.00	12	134.84 Pool	LID not found	Other
1797	124090	Hs.206721	R02710	15.11	0.83	18.23	2.00	0.00	4	218.11 Ear	Smooth musc	Fore skin
1799	204545	Hs.8966	H58644	120.73	5.90	20.46	13.00	2.00	2	434.43 Stomach	Pool	LID not found
1805	206094	Hs.171849	H81608	28.07	4.81	6.09	1.00	0.00	10	LID not found	Other	
1809	208769	Hs.70404	H61037	18.90	2.87	6.58	1.00	0.00	10	Pool	LID not found	Other
1825	198578	Hs.35354	R94608	8.58	0.69	12.50	4.00	0.00	3	697.77 Pool	Bone	Brain
1827	144870	Hs.101566	R76636	16.37	2.86	5.73	1.00	0.00	3	Tonsil	LID not found	Other
1829	210710	Hs.36728	H58883	64.09	11.31	5.67	2.00	0.00	11	Pool	LID not found	Other

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1832	415700	Hs.129546	W55987	17.08	0.85	17.35	4.00	0.00	3	726.84	Small intestine	Stomach
1837	202402	Hs.183877	W63224	26.35	4.25	6.15	1.00	0.00			LID not found	Other
1839	244652	Hs.187217	N52811	96.41	17.99	6.53	1.00	0.00	19	247.58	Pool	Other
1842	247859	Hs.141547	N77652	81.01	11.01	7.35	2.00	0.00	21	181.24	Peripheral ner	Smooth muscle
1844	425047	Hs.118174	AA007509	45.66	7.23	6.31	4.00	0.00	10	114.89	Pool	LID not found
1845	202553	Hs.205543	H53262	46.02	6.99	7.02	2.00	0.00	1	27.3	Pool	LID not found
1846	122963	Hs.182868	R00220	56.94	8.10	7.27	2.00	0.00	3	49.43	Pool	Other
1849	276534	Hs.35372	R94840	32.68	2.47	13.23	14.00	0.00	19	40.39	Nose	Muscle
1851	172783	Hs.101750	H20045	17.01	1.26	13.50	2.00	1.00	X	92.32	Lung	LID not found
1854	125737	Hs.185862	R07861	12.88	2.05	6.28	1.00	0.00			Pool	Other
1851	202704	Hs.174344	H53878	765.96	42.81	6.21	1.00	0.00	6	468.65	Aorta	Whole embryo
1852	123448	Hs.185585	R00568	190.44	23.69	8.04	2.00	0.00	15	271.57	Adrenal gland	Whole embryo
1853	267431	Hs.183870	N22980	32.10	5.90	5.74	1.00	0.00	3	56.61	Trachea	Lymph node
1854	357628	Hs.73875	W94120	29.20	5.11	5.72	2.00	0.00	12	217.17	Forekin	Adrenal gland
1871	257634	Hs.85181	N25425	25.86	2.86	9.73	4.00	0.00	13	155.48	Pool	LID not found
1872	291097	Hs.24048	N72137	8.68	0.10	85.79	8.00	0.00	1	93.95	Muscle	Pool
1875	205417	Hs.102155	H59838	29.74	3.31	8.99	2.00	0.00	X	340.75	Pool	LID not found
1877	128280	Hs.182860	H53920	28.85	0.63	45.78	7.00	1.00	4	315.1	Neural	Forekin
1878	128280	Hs.183008	R09890	37.78	6.21	6.09	2.00	0.00	8	53.15	Stomach	Whole embryo
1883	232568	Hs.142258	H73321	47.88	7.84	6.11	2.00	0.00	17	404.02	Pool	Pancreas
1887	259806	Hs.81865	N24824	10.94	1.00	10.64	0.00	2.00	9	62.35	Pool	LID not found
1897	199239	Hs.38457	R06823	36.86	3.06	11.97	6.00	0.00	8	118.49	Small intestine	Thymus
1900	148800	Hs.71119	H13424	87.84	8.51	10.32	7.00	0.00	5	501.96	Pancreas	Pancreas
1904	322961	Hs.76366	W45165	43.52	4.13	10.55	6.00	0.00	17	62.35	Pool	LID not found
1905	199220	Hs.124658	R65451	17.87	1.67	10.68	1.00	2.00	9	118.49	Small intestine	Thymus
1907	233579	Hs.206507	H78482	65.07	5.20	12.62	3.00	0.00	19	250.6	Breast	LID not found
1908	417711	Hs.181366	W08967	111.37	2.61	42.74	2.00	6.00	17	22.32	Synovial mem	Thyroid
1915	229300	Hs.102243	H70363	183.56	35.37	5.19	1.00	0.00	22	86.29	Smooth musc	Cervix
1918	155201	Hs.202988	H70361	89.10	6.90	12.91	3.00	1.00	3	198.24	Parathyroid	Bone
1922	194804	Hs.79709	R98808	36.13	4.44	2.00	1.00	0.00	7	34.75	Brain	LID not found
1924	108667	Hs.217729	T72698	24.06	4.15	5.79	1.00	2.00	1	596.98	Adrenal gland	Forekin
1926	240151	Hs.160919	H82706	54.58	8.75	6.24	1.00	2.00	10	381.57	Adrenal gland	Ovary
1931	40887	Hs.159142	R56562	5.43	0.27	19.91	4.00	2.00	18	296.38	Ear	Nose
1932	688442	Hs.71891	AA2X3828	74.43	3.98	18.72	15.00	4.00	X	547.86	Peripheral ner	Small intestine
1934	810485	Hs.175424	AA457158	9.65	0.40	24.07	8.00	6.00	17	405.47	Bone marrow	Gall bladder
1938	43884	Hs.173125	H05580	83.55	13.22	6.32	3.00	0.00	2	147.27	Head and nec	Bone
1939	120881	Hs.107325	T98083	127.34	8.56	13.32	11.00	3.00	X	54.22	Forekin	Gall bladder
1940	285788	Hs.80081	N66842	55.27	3.33	16.80	7.00	0.00	2	303.21	Pancreas	LID not found
1943	549073	Hs.75546	AA083228	187.40	16.27	9.16	5.00	1.00	11	257.8	Larynx	Thyroid
1944	45632	Hs.772	H08446	7.57	0.32	23.89	7.00	6.00	2	203.26	CNS	Gall bladder
1946	182775	Hs.76053	H27564	114.88	11.66	9.85	8.00	0.00	2	408.02	Synovial mem	CNS
1950	813426	Hs.177422	AA464627	190.13	8.90	21.36	6.00	0.00	12	130.31	Aorta	Pancreas
1951	134322	Hs.155416	AA458653	20.82	2.17	9.50	0.00	1.00	1	339.21	Bone	Uterus
1954	136233	Hs.203387	R31838	6.31	1.00	6.31	0.00	1.00	1	247.84	Esophagus	Pooled
1955	136233	Hs.195207	R33755	215.84	12.33	17.51	3.00	0.00	337.48	Lymph node	Stomach	Testis
1956	810713	Hs.170177	AA001444	44.26	4.00	11.06	2.00	1.00	294.3	Umbilical cord	Aorta	CNS
1966	810713	Hs.188351	AA484525	22.60	1.00	22.60	0.00	3.00	6	550.81	Esophagus	Gall bladder
1971	325082	Hs.78452	AA463456	44.24	6.35	5.30	1.00	0.00	37.19	Cervix	Pancreas	Blood
1978	128159	Hs.169750	W47073	19.87	1.55	12.71	15.00	0.00				
1980	234011	Hs.25051	R11490	5.44	0.39	13.80	7.00	5.00				
1984	713922	Hs.159159	H66158	18.37	1.55	12.47	0.00	2.00				
1980	346117	Hs.171682	AA290737	81.94	5.63	14.48	1.00	4.00				
1992	137940	Hs.2008	W77627	14.24	1.52	9.39	0.00	2.00				
1995	589433	Hs.27076	R53108	56.41	9.18	6.16	1.00	2.00				
1998	47900	Hs.202900	AA146802	50.39	1.13	44.70	14.00	0.00				
2000	381039	Hs.193432	H11482	50.67	10.06	5.04	0.00	1.00				
			W69288	29.87	0.12	257.47	9.00	6.00				

Table 3A

2004	210862	Hs.167835	H85659	17.51	2.96	5.92	1.00	0.00	16	Small intestinePooled	Uterus
2010	289388	Hs.151734	N75595	79.43	0.32	10.40	2.00	4.00	7	405.23 Stomach	Cervix
2014	660695	Hs.102122	AA23079	5.50	0.64	8.65	2.00	3.00	7	215.58 Uterus	Placenta
2015	52933	Hs.79136	H29407	87.12	9.17	7.32	2.00	0.00	18	293.03 Thyroid	Breast
2017	688138	Hs.811	AA598492	34.58	6.62	5.22	2.00	1.00	5	500.36 Nose	Germ Cell
2018	789204	Hs.8146	AA450205	91.07	8.16	14.80	2.00	1.00	3	627.1 Adipose	Ear
2019	841352	Hs.146391	AA47651	40.30	6.66	6.05	2.00	0.00	X	326.72 Larynx	Pooled
2021	509484	Hs.106081	AA056390	58.98	11.81	3.84	2.00	0.00	6	118.59 Skin	Adrenal glandThyroid
2022	898032	Hs.76989	AA598942	70.10	10.71	6.54	2.00	0.00	11	165.94 Gall bladder	Heart
2023	950352	Hs.80612	AA800175	78.85	10.16	7.88	5.00	0.00	X	298.39 Skin	Umbilical cord Gall bladder
2026	814636	Hs.199211	AA481026	33.77	3.87	8.73	1.00	2.00	9	18.58 Lymph node	Parathyroid
2027	511586	Hs.151604	AA127116	1080.62	187.57	5.76	3.00	0.00	12	242.74 Lymph	Umbilical cord
2028	201168	Hs.21879	R98532	24.42	3.36	7.26	6.00	0.00		Umbilical cord Germ Cell	Pool
2031	814381	Hs.75169	AA459051	83.89	14.82	5.74	2.00	0.00		Adipose	Stomach
2033	893282	Hs.2055	AA598670	297.27	38.22	7.78	1.00	0.00	X	137.28 Peripheral ner Bone marrow	Larynx
2038	768721	Hs.154791	AA449957	8.00	0.10	89.96	4.00	3.00	1	62.32 Smooth muscle	Gall bladder
2043	41550	Hs.809	R52797	8.61	1.14	7.56	4.00	0.00	7	455.24 CNS	Brain
2044	140100	Hs.137005	R68732	35.52	4.81	7.38	2.00	0.00	6	512.44 Smooth muscle	Pooled
2048	68594	Hs.13041	T67104	9.29	0.31	30.34	8.00	6.00	X	177.41 Lymph	Aorta
2050	784126	Hs.208810	AA446748	17.93	0.77	23.43	7.00	6.00		Kidney	Colon
2052	382773	Hs.160532	AA084973	239.26	8.94	26.77	4.00	3.00	14	278.24 Adrenal gland	Forekin
2056	340712	Hs.16510	W55957	5.05	1.00	6.05	0.00	1.00	11	253.29 Adrenal gland	Blood
2059	504544	Hs.89555	AA149096	20.34	3.44	5.91	0.00	2.00	20	172.24 Skin	Uterus
2081	525566	Hs.5947	AA064715	21.72	0.34	63.90	7.00	6.00	19	87.54	
2083	841008	Hs.82661	AA486849	13.71	2.61	5.25	1.00	1.00	1	252.77 Umbilical cord	Thyroid
2089	898148	Hs.196331	AA598498	51.15	9.65	5.29	0.00	1.00	15	310.55 Aorta	Pancreas
2070	815529	Hs.79123	AA457047	30.68	0.68	44.87	9.00	6.00	3	69.22 Tonsil	Ear
2071	840300	Hs.74576	AA487812	286.80	13.77	18.86	6.00	0.00	1	351.05 Peripheral ner	Synovial mem
2074	843110	Hs.1686	H92232	71.62	13.86	5.16	1.00	0.00	X	-3.25 Small intestine	Nose
2078	221826	Hs.136309	R93782	51.69	0.63	18.51	9.00	8.00		Esophagus	Synovial mem
2080	197791	Hs.138164	AA487837	14.27	1.00	14.27	2.00	4.00	1	241.66 Stomach	Adipose
2081	841340	Hs.74555	H23202	9.14	1.00	9.14	1.00	3.00	6	117.89 Omentum	Larynx
2082	52079	Hs.191435	AA088745	38.62	0.27	144.21	7.00	6.00	12	299.81 Brain	Ear
2086	760937	Hs.74554	AA446147	22.05	1.68	13.09	0.00	1.00	11	271.39 Colon	Uterus
2096	327794	Hs.108990	W15533	34.27	6.76	5.07	1.00	0.00	2	497.84 Brain	Adrenal gland
2101	824024	Hs.73956	AA481124	74.08	0.55	136.33	7.00	6.00	20	12.07 Forekin	Eye
2105	841703	Hs.77356	AA488721	139.42	12.25	11.38	3.00	1.00	6	17.79	Thyroid
2109	826077	Hs.979	AA521401	57.92	7.55	7.87	1.00	0.00	3	728.84 Smooth muscle	Placenta
2111	840890	Hs.82891	AA488609	65.43	6.25	10.47	1.00	0.00		CNS	Heart
2113	124116	Hs.184325	R01340	41.99	4.43	9.48	6.00	1.00	1	339.79 Germ Cell	Spleen
2116	134455	Hs.28398	R84628	27.89	1.92	14.54	14.00	1.00	X	Tonsil	Lymph
2117	205990	Hs.25516	H61530	18.82	2.43	7.78	3.00	0.00	5	82.32 Aorta	Gall bladder
2123	341821	Hs.94768	W60745	34.22	4.86	7.31	6.00	2.00	5	578.17 Thyroid	Eye
2132	141453	Hs.167812	R89997	7.43	1.45	5.13	1.00	0.00	5	223.16 Aorta	Stomach
2136	193533	Hs.33962	H47542	33.47	1.00	33.47	5.00	6.00	4	102.82 Pool	Uterus
2142	111758	Hs.176471	T80374	80.87	11.95	6.77	2.00	0.00	19	277.06 Thyroid	Uterus
2144	211004	Hs.33973	H71657	16.34	1.00	16.34	3.00	1.00	5	453.26 CNS	Testis
2148	141765	Hs.28036	R69798	5.98	1.00	5.98	0.00	1.00	9	356.18 Placenta	Uterus
2149	345423	Hs.107842	W76032	48.68	8.30	5.87	2.00	0.00		Adrena gland	Pooled
2152	233289	Hs.33977	H78855	32.09	1.00	32.09	3.00	6.00	16	96.57 CNS	Tonsil
2156	142397	Hs.206507	R89934	144.43	2.25	64.30	5.00	6.00	X	245.08 Kidney	Breast
2161	276286	Hs.186726	R94591	84.38	8.36	10.09	2.00	0.00	3	726.84 Pool	Uterus
2168	295866	Hs.182014	N87008	80.55	3.82	21.08	9.00	5.00	12	241.3 Ovary	Other
2174	245860	Hs.181104	N55339	26.00	3.94	6.80	2.00	0.00	9	53.56	Nose
2183	341805	Hs.146400	W60845	12.68	1.41	8.99	1.00	1.00	18	427 Aorta	Adrenal gland
2186	127610	Hs.192860	R99284	211.81	30.17	7.02	3.00	1.00	22	84.2 Pool	Kidney

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2193	141314	Hs.113029	R63811	22.59	4.03	5.60	0.00	1.00	3	38.45	Muscle	Umbilical cord	Adipose
2196	135128	Hs.194021	R70316	61.78	3.36	16.37	2.00	3.00	3	141.89	Breast	Prostate	Prostate
2197	365098	Hs.3990	A025195	185.37	13.70	12.07	9.00	1.00	8	105.91	Bone marrow	Smooth muscle	Spleen
2201	307832	Hs.24930	V21373	201.83	30.54	6.81	1.00	0.00			Muscle	Bone	Bone
2204	240748	Hs.29108	H91337	32.24	2.38	13.56	12.00	0.00	6	137.73	Gall bladder	Tonsil	Breast
2208	193724	Hs.203678	H47683	17.13	1.48	11.59	12.00	0.00	1	63.34	Ear	Lung	Lung
2210	126228	Hs.77877	R08313	8.85	1.85	5.37	1.00	0.00	1	218.22	Placenta	Colon	Colon
2211	144912	Hs.210077	R78534	5.88	1.00	5.88	0.00	1.00	19				
2212	811150	Hs.193000	AA485734	22.29	1.00	22.29	2.00	0.00	22	126.99	Ignore	Larynx	Testis
2213	242084	Hs.75932	H93842	25.24	3.20	7.89	2.00	0.00	5	357.75	Pool	LID not found	Other
2214	294127	Hs.60122	N71365	133.97	2.12	63.14	9.00	8.00	13	147.98	Whole embryo	Placenta	Placenta
2216	795375	Hs.108619	AA453275	177.22	30.82	5.75	1.00	3.00	1	74.05	Adrenal gland	Small intestine	Small intestine
2224	808413	Hs.10101	AA459805	7.46	1.00	7.46	1.00	0.00	1		Pool	Quary	Quary
2229	202051	Hs.41895	H93462	121.25	22.73	5.34	1.00	0.00			LID not found	Other	Other
2230	203302	Hs.116534	H54764	67.13	7.30	7.83	3.00	0.00	1	352.04	Pool	LID not found	Other
2238	204360	Hs.93221	H57859	24.54	4.51	5.44	1.00	0.00	1	15.89	Lymph node	LID not found	Other
2239	505344	Hs.182699	AA147828	11.70	0.84	12.40	4.00	4.00	1	242.09	Pericardial ner	Brain	Brain
2244	503335	Hs.6166	AA130183	65.65	4.70	11.82	18.00	1.00	16		Forebrain	LID not found	Other
2247	208893	Hs.208710	N72009	12.40	0.50	24.72	5.00	1.00	5	469.28	Forebrain	LID not found	Other
2251	287241	Hs.43230	N21681	66.63	7.02	6.50	2.00	0.00	1	871.44	Thymus	Skin	Testis
2255	247582	Hs.20535	N54244	183.85	20.83	7.87	1.00	0.00	1		Skin	Eye	Testis
2257	292424	Hs.194637	N91202	17.17	1.08	15.82	2.00	0.00	4	636.05	Gall bladder	Liver	Spleen
2259	324510	Hs.56123	AA3284277	15.24	2.31	6.60	1.00	0.00			Pool	LID not found	Other
2262	241179	Hs.184383	H91121	41.59	3.34	12.44	4.00	3.00	1		Head and nec	Ear	Adipose
2263	415848	Hs.192904	V85376	109.92	14.92	7.37	2.00	0.00			Forebrain	Pool	LID not found
2264	809719	Hs.105111	AA455487	170.09	6.27	27.12	19.00	4.00			Umbilical cord	Prostate	Eye
2271	268960	Hs.117895	N24645	21.41	4.26	5.36	0.00	1.00	20	70.67	Pool	LID not found	Other
2275	1030953	Hs.5009	AA620357	5.36	1.00	5.36	0.00	1.00	7	423.73	Skin	Liver	Breast
2278	211659	Hs.103672	H88719	105.30	20.51	5.13	1.00	0.00	1	102.99	Synovial mem.	Thyroid	Adipose
2286	128426	Hs.83334	R10526	26.60	3.87	0.88	4.00	0.00	19	102.57	Pool	LID not found	Other
2291	324703	Hs.16003	AA384235	17.98	2.52	8.88	4.00	0.00	16	45.38	Epididymis	Colon	Muscle
2300	810813	Hs.143187	AA464741	7.48	0.39	19.37	8.00	4.00	15	271.47	Ear	Parathyroid	Heart
2302	235173	Hs.133137	H73013	35.34	5.37	6.59	2.00	0.00	15	262.02	Muscle	Heart	Stomach
2306	190491	Hs.90303	H37774	42.49	5.34	7.85	4.00	3.00	2	741.58	Umbilical cord	Esophagus	Whole embryo
2307	754093	Hs.62753	AA479189	19.61	1.00	19.61	2.00	1.00	4	178.89	Smooth muscle	CNS	Cervix
2311	383590	Hs.6111	AA019774	5.08	1.00	5.06	0.00	3.00	4	437.67	Thyroid	Parathyroid	Brain
2314	341328	Hs.77888	V85892	142.04	6.51	21.80	18.00	1.00	9	312.71	Smooth muscle	Stomach	Whole embryo
2315	246788	Hs.23016	N53172	13.93	1.00	13.93	1.00	0.00	1	585.11	Thymus	Breast	Pool
2318	214537	Hs.166563	H73714	40.60	7.38	5.52	1.00	0.00	1	129.43	Cervix	Colon	Aorta
2320	823891	Hs.79069	AA488752	28.86	4.81	6.23	0.00	2.00	13	88.14	Bone	Pool	LID not found
2322	723986	Hs.193789	AA410680	32.99	4.78	8.90	0.00	1.00	4	557.16	CNS	Brain	CNS
2326	159118	Hs.75042	R76314	14.79	2.83	5.24	1.00	0.00	1	88.45			
2328	248371	Hs.75047	N72623	21.72	2.44	8.91	3.00	0.00	11	130.57	Synovial mem	Tonsil	Parathyroid
2331	229716	Hs.74407	R48256	102.67	17.08	8.02	2.00	0.00	1	260.05	Placenta	Bone	Pool
2338	306813	Hs.126700	N78051	6.26	1.22	5.12	1.00	0.00	6	106.25	CNS	Forebrain	Thyroid
2340	280236	Hs.78877	N50247	37.87	5.16	7.34	9.00	0.00	3	84.9	Gall bladder	Umbilical cord	Ear
2354	362624	Hs.94413	AA017341	16.18	0.60	26.88	8.00	5.00	3	705.24	CNS	Pool	Forebrain
2355	241828	Hs.181163	H93087	73.86	0.70	106.13	9.00	6.00	17	304.78	Larynx	Cervix	Lymph
2358	810521	Hs.194585	AA464644	6.25	1.00	6.25	0.00	2.00	12	291.26	Head and nec	Umbilical cord	Lymph
2362	208655	Hs.70059	H62473	50.39	2.35	21.45	4.00	5.00	3	473.87	Liver	Eye	Gall bladder
2363	31873	Hs.63272	R17124	116.96	17.74	6.56	2.00	0.00	1	72.78	Prostate	Placenta	Lung
2366	755663	Hs.171486	AA419184	24.67	3.53	6.98	3.00	1.00					
2370	666218	Hs.169300	AA233809	11.59	0.27	43.65	7.00	5.00					
2372	204214	Hs.69583	H59203	24.40	3.13	7.79	3.00	0.00					
2376	243543	Hs.6458	N38959	151.11	27.55	5.48	1.00	0.00					
2378	212429	Hs.75155	H68531	8.43	1.00	8.43	1.00	2.00					
2380	135692	Hs.290	R32409	6.83	1.00	6.83	1.00	2.00					

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2382	813402	Hs.3210	AA455535	6.60	1.00	6.60	3.00	2.00	4	Kidney	Ovary	Pool
2384	770462	Hs.76088	AA427724	25.98	0.55	47.23	8.00	6.00	4	83.71 Stomach	Uterus	Placenta
2387	190887	Hs.82116	H35363	27.83	2.51	11.05	0.00	1.00	3	135.46 Ear	Gall bladder	Uterus
2391	46154	Hs.106514	H09065	8.23	0.51	18.17	9.00	6.00	3	162.86 Thyroid	Adipose	Spleen
2401	282463	Hs.48576	N62588	41.02	6.25	5.66	3.00	1.00	13	285.86 Synovial mem	Lymph	Thyroid
2402	81129	Hs.146550	T69926	376.57	14.23	26.46	6.00	2.00	22	122.91 Peripheral ner	Ignore	Neural
2403	760282	Hs.85524	AA47959	11.77	2.33	5.08	1.00	0.00	8	115.13 Muscle	Whole embryo	Testis
2405	811942	Hs.89576	AA455003	22.01	3.78	5.88	2.00	0.00	11	63.38 Eye	Lymph	Adrenal gland
2408	857860	Hs.78150	AA588637	232.77	8.97	25.96	6.00	0.00	4	673.59 Bone marrow	Cervix	Adrenal gland
2409	810039	Hs.82590	AA453261	158.99	30.06	5.29	1.00	0.00	14	14.51 Lymph node		Skin
2410	68103	Hs.90318	T52994	408.38	36.89	10.45	8.00	0.00	2	647.83 Stomach	Bone	Muscle
2414	843248	Hs.66708	AA466016	172.87	16.33	10.58	10.00	2.00	1	23.89 Umbilical cord	Adrenal gland	Bone
2415	824382	Hs.76183	AA468698	59.77	11.81	6.15	2.00	0.00	3	199.85 Head and nec	Gall bladder	Eye
2418	262000	Hs.153837	N29376	9.12	1.00	9.12	0.00	2.00	1	570.96 Blood	Aorta	Germ Cell
2419	762487	Hs.6349	AA432023	22.60	3.80	5.95	0.00	2.00	16	164.89 Eye	Thyroid	Brain
2420	586122	Hs.199200	AA598478	104.63	0.61	171.45	9.00	6.00		Adrenal gland	Stomach	Bone
2421	201727	Hs.135024	R98749	10.81	0.10	108.13	6.00	4.00	3	694.79 CNS	Uterus	Tonsil
2422	231355	Hs.184534	H56535	18.56	2.74	6.78	1.00	2.00	17	46.87		
2424	66560	Hs.161125	T67053	15.83	2.25	7.03	1.00	1.00	22	46.87		
2425	198189	Hs.83034	R92281	52.87	3.82	13.80	2.00	3.00	18	462.01 Gall bladder	Nose	Skin
2426	51974	Hs.57707	H23310	6.12	1.00	6.12	0.00	2.00	4	457.11 CNS	Testis	Lung
2429	153473	Hs.87001	R48232	12.74	0.10	127.36	8.00	3.00	X	112.8 Umbilical cord	Fore skin	Pooled
2430	795933	Hs.15154	AA446569	125.66	1.00	125.66	23.00	4.00		Tonsil	Colon	Pool
2431	825399	Hs.69876	AA504259	10.90	0.21	32.59	9.00	6.00	10	128.92 Small intestine	Parathyroid	Eye
2434	740457	Hs.431	AA478036	49.69	2.51	19.83	9.00	0.00	6	44.88 Muscle	Germ Cell	Whole embryo
2436	85834	Hs.169758	T62048	276.03	4.69	55.35	9.00	6.00	12	Tonsil	Germ Cell	Blood
2438	712668	Hs.50840	AA280137	5.38	1.00	5.38	0.00	1.00		165.59 Placenta	Pool	LID not found
2441	149737	Hs.141142	H00592	16.73	1.00	16.73	10.00	2.00	15	247.34 Gall bladder	Adrenal gland	Tonsil
2442	685371	Hs.24287	AA281796	8.84	1.39	6.38	1.00	0.00	11	364.57 Umbilical cord	Thymus	Placenta
2443	785793	Hs.184270	AA448037	214.81	36.43	5.90	2.00	0.00	1	58.61 CNS	Umbilical cord	Pool
2445	862528	Hs.74520	AA256507	20.72	2.73	7.58	0.00	2.00	6	373.32 Liver	Gall bladder	Adipose
2446	85840	Hs.76669	T72235	152.31	4.27	35.66	11.00	3.00	11	46.49 Fore skin	Muscle	Kidney
2453	285137	Hs.101840	N71663	17.60	1.36	12.86	7.00	3.00	17	247.33	Synovial mem	Cervix
2456	951117	Hs.75089	AA620477	57.68	11.38	5.07	1.00	0.00	12	592.03 Heart	Whole embryo	Aorta
2458	896219	Hs.79284	AA598610	23.17	4.46	5.19	0.00	1.00	7	CNS	Heart	Lymph
2459	753587	Hs.187741	AA478585	43.00	7.54	5.70	0.00	2.00	11	272.86 Heart	Spleen	Bone
2460	142768	Hs.9930	R71440	226.61	28.51	7.81	0.00	6.00	12	45.2 Umbilical cord	Eye	Synovial membrane
2471	810552	Hs.7771	AA464669	75.07	0.58	129.72	9.00	2.00	X	270.9 Brain	Testis	Whole embryo
2472	797059	Hs.21365	AA463251	14.19	2.72	5.21	1.00	0.00	8	423.72		
2474	48918	Hs.90800	H09897	86.35	1.54	58.12	14.00	0.00		107.4 Adipose	Lung	Breast
2482	48866	Hs.199284	H16389	5.59	1.00	5.59	0.00	2.00	10	290.05 CNS	Pooled	Bone
2483	40562	Hs.77501	R55105	33.37	4.71	7.08	7.00	0.00	4	496.43 Mouth	Ear	Bone
2484	839991	Hs.178573	AA490172	810.79	4.77	169.99	5.00	6.00	7	244.74 Kidney	Brain	Esophagus
2485	753610	Hs.189401	AA478589	47.31	4.03	11.75	3.00	2.00	19	726.84 Peripheral ner	Adipose	Breast
2493	158608	Hs.75738	H15842	26.37	2.37	11.13	3.00	6.00	3	Omentum	Skin	Nose
2495	351097	Hs.118797	AA017200	115.58	21.98	5.26	1.00	0.00		727.12 Synovial mem	Umbilical cord	Bone
2502	29063	Hs.119007	R40670	7.26	1.00	7.26	1.00	0.00	1	Esophagus	Skin	Gall bladder
2505	141854	Hs.107159	R70598	54.14	8.95	8.05	1.00	0.00	12	319.85 Brain	Pool	LID not found
2512	286552	Hs.27281	Y00877	155.65	1.34	116.21	14.00	0.00	11	104.49 Stomach	Adrenal gland	Aorta
2525	232899	Hs.91393	H75578	135.71	18.43	7.36	2.00	0.00		Pool	LID not found	Other
2531	126355	Hs.189791	R06544	30.96	3.64	8.07	1.00	0.00	4	580.58 Thyroid	Pooled	Prostate
2545	243260	Hs.174877	H05823	94.18	11.83	7.89	2.00	0.00	13	107.1 Pool	Lung	Liver
2552	198451	Hs.29334	R94659	31.47	3.13	10.07	7.00	6.00	6	623.15 Stomach	Spleen	Muscle
2553	128735	Hs.53106	R14602	29.64	5.18	5.69	1.00	0.00		CNS	Brain	Liver
2559	127120	Hs.81088	R08121	117.48	2.37	48.56	23.00	5.00		457.41 Pool	LID not found	Other
2560	167076	Hs.27768	R89700	27.22	1.75	15.60	13.00	0.00	12			
2561	110565	Hs.15111	T90201	15.24	0.44	34.93	9.00	3.00				

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2563	120863	Hs.78793	T96077	5.29	0.18	28.66	6.00	3.00	1	-1.31 Pool	LID not found	Other
2564	135094	Hs.152699	R31428	137.52	24.39	5.64	1.00	0.00	12	246.56 Placenta	LID not found	Other
2565	240691	Hs.107691	N59690	63.73	12.33	5.33	1.00	1.00	9	826.75 Ear	Small intestine	Eye
2570	111881	Hs.178972	T84633	15.31	2.73	5.62	0.00	1.00	13	288.66 Epididymis	Adipose	
2573	252978	Hs.188818	N82895	400.94	55.87	7.18	2.00	0.00	14	281.08		
2576	195429	Hs.203679	R89014	6.43	1.17	7.19	2.00	0.00	1	611.94 Pool	Brain	LID not found
2578	242708	Hs.35378	H93552	97.42	16.49	5.91	1.00	0.00	20	43.12 Gall bladder	Smooth muscle	
2592	214205	Hs.28149	H77797	40.13	2.28	17.59	8.00	0.00	8	367.64 Ovary	Breast	Pool
2596	415284	Hs.164397	V92011	9.59	1.47	6.63	1.00	0.00	6	Adipose	Stomach	Pool
2601	197856	Hs.35533	R86206	25.78	2.60	9.92	3.00	0.00	6	315.52 Pool	LID not found	Other
2602	262312	Hs.48561	N76206	11.86	2.33	6.10	1.00	0.00	6	39.19 Pool	LID not found	Other
2604	489031	Hs.47638	AA057073	6.76	1.02	6.64	1.00	0.00		CNS	Uterus	Pool
2606	191572	Hs.52889	H37880	102.78	16.09	6.39	2.00	1.00	11	419.63 Spleen	CNS	Bone
2607	260882	Hs.108043	N30806	6.53	0.53	12.22	2.00	1.00	10	126.92 Small intestine	Parathyroid	Eye
2608	115408	Hs.431	T87515	32.83	1.30	25.17	5.00	0.00		Bone	Blood	Whole embryo
2610	292364	Hs.48565	N78222	21.80	3.21	6.79	0.00	1.00	10	310.17 Pool	LID not found	Other
2611	243414	Hs.102344	N48139	20.80	2.62	7.68	0.00	1.00		Bone	Blood	Whole embryo
2615	295226	Hs.2780	N68278	84.29	5.20	16.22	0.00	1.00	10	310.17 Pool	LID not found	Other
2616	366971	Hs.203779	AA026882	68.64	9.32	7.38	3.00	0.00	17	330.2	Head and nec	Adrenal gland
2620	357373	Hs.77695	V93717	32.41	1.80	18.04	6.00	0.00		Head and nec	Adrenal gland	Tonsil
2622	155132	Hs.193415	R91215	78.02	2.81	27.81	3.00	1.00	4	102.82	Heart	Tonsil
2626	252654	Hs.48004	N80458	14.59	2.34	6.24	1.00	0.00		Heart	Tonsil	
2628	139165	Hs.172405	R11019	12.21	1.57	7.77	2.00	0.00		Heart	Tonsil	
2629	203122	Hs.191305	H54423	60.77	10.86	5.60	2.00	0.00		Pool	LID not found	Other
2630	292471	Hs.53099	N91231	41.37	6.47	6.39	2.00	0.00		Pool	LID not found	Other
2631	233715	Hs.3642	N89689	135.41	21.67	6.25	1.00	0.00		Aorta	CNS	Germ Cell
2635	208210	Hs.162670	H65286	21.63	3.87	3.59	1.00	0.00	17	68.81	Pool	LID not found
2641	245298	Hs.35574	N53453	29.31	1.88	15.59	5.00	4.00	12	384.02 Aorta	Ear	Spleen
2643	140861	Hs.102541	R76814	14.30	2.65	5.40	0.00	1.00	9	678.46 Synovial mem	CNS	Pancreas
2644	340519	Hs.76894	V51951	9.16	0.50	16.20	5.00	0.00	4	267.97 Muscle	Blood	Eye
2648	339119	Hs.83758	AA010065	83.84	11.64	7.20	1.00	0.00	4	22.25 Ear	Pooled	Tonsil
2652	347702	Hs.19686	V81570	132.22	0.10	132.19	11.00	6.00	18	14.7 Pool	LID not found	Other
2654	201203	Hs.53127	R95287	158.79	24.98	6.36	2.00	0.00	2	627.13		
2655	309776	Hs.195175	N94568	51.64	10.36	5.00	1.00	0.00	9	122.49 Synovial mem	Pool	Bone
2659	240208	Hs.102669	H79705	25.44	5.03	3.06	0.00	1.00		Periphral ner	Blood	Stomach
2663	309864	Hs.198951	N94468	126.61	4.02	31.37	7.00	6.00	1	81.13 Thymus	Colon	Breast
2664	240444	Hs.94953	N38801	16.16	1.00	18.18	1.00	8.00	X	298.29 Epididymis	Head and nec	Umbilical cord
2667	142568	Hs.102696	R70784	58.20	11.12	5.23	2.00	0.00		Pooled	Heart	Bone
2672	343990	Hs.37482	W70230	15.59	2.74	5.68	1.00	2.00		Skin	Lymph node	Pancreas
2676	1031744	Hs.186302	AA609568	144.46	11.71	12.34	3.00	0.00		Pool	LID not found	Other
2678	243428	Hs.193171	N49439	27.64	4.59	6.02	1.00	0.00	2	437.34 Head and nec	Parathyroid	Smooth muscle
2679	328117	Hs.181309	W12597	21.57	0.29	73.36	9.00	6.00	12	247.55 Neural	Breast	Eye
2680	290753	Hs.74335	N87639	55.04	6.22	8.85	5.00	0.00	2	192.45 Marrow	Ovary	Pool
2685	207448	Hs.203838	H60119	13.74	2.32	5.93	2.00	0.00	21	-12.1 Head and nec	Pancreas	Stomach
2690	809827	Hs.155017	AA458503	17.00	1.17	14.53	4.00	1.00	X	83.95 Foreskin	Muscle	Aorta
2691	204148	Us.173905	H55821	44.00	2.41	16.27	8.00	1.00	12	202.51 Smooth muscle	Adrenal gland	Thymus
2692	234582	Hs.51957	H78241	29.69	5.54	5.35	1.00	0.00	2	687.62 Thyroid	Esophagus	Blood
2699	43542	Hs.103391	H08560	251.48	1.58	196.13	21.00	6.00	7	585.14	Stomach	Adrenal gland
2702	39854	Hs.850	R52542	6.30	0.10	82.97	6.00	8.00	17	421.12 Eye	Stomach	Pooled
2703	33049	Hs.151573	R19031	21.33	2.42	8.80	3.00	0.00	17	306.36 Kidney	Pool	LID not found
2704	768246	Hs.80206	AA424937	32.75	3.49	9.37	9.00	2.00	2	637.79 Cervix	Bone	Kidney
2712	122636	Hs.147082	T88866	48.48	8.10	5.89	2.00	0.00	10	11.54 Neural	Bone	Adrenal gland
2716	810891	Hs.11689	AA458519	87.61	0.10	876.14	9.00	6.00	11	355.27 Adipose	Stomach	CNS
2722	733457	Hs.8248	AA406535	62.90	12.08	5.22	2.00	0.00	5	138.07 Eye	Whole embryo	Spleen
2723	44975	Hs.76038	H08869	67.81	4.69	14.72	6.00	0.00				
2726	183184	Hs.74122	H45000	14.01	1.00	14.01	0.00	1.00				
2727	24642	Hs.174165	T80232	8.66	1.50	5/6	0.00	4.00				

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2728	471498	Hs.2703	AA035347	7.83	0.22	35.49	9.00	0.00	12	276.81	Pooled Blood	Blood	Placenta
2732	212078	Hs.110774	H08922	24.21	4.12	5.88	2.00	0.00	3	232.58	Stomach	Lymph	Kidney
2736	127509	Hs.1091	R08089	171.84	9.53	18.01	18.00	2.00	3	159.1	Synovial mem	Muscle	Bone
2743	813279	Hs.78223	AA455408	39.20	7.10	12.86	1.00	0.00	7	80.45	Blood	Skin	Thymus
2743	470179	Hs.173362	AA025963	12.88	1.00	12.86	4.00	3.00	3	247.64	Thymus	Unilobal cord	Stomach
2744	51362	Hs.77900	H23978	45.81	5.82	1.00	1.00	0.00	1	338.52	Placenta	Uterus	Pool
2750	141966	Hs.38586	R08103	92.92	1.00	92.92	23.00	6.00	15	145.46	Eye	Colon	Whole embryo
2751	123602	Hs.61418	R01323	48.37	6.79	7.13	1.00	0.00	15	41.84	Ear	Colon	Whole embryo
2763	823959	Hs.61795	AA490688	6.33	0.85	9.77	1.00	1.00	13	180.44	Forebrain	Whole embryo	Germ Cell
2763	281204	Hs.192638	H94218	13.30	1.97	6.74	4.00	0.00	3	414.14	CNS	Parathyroid	Ear
2767	166501	Hs.75412	R31550	10.64	0.55	19.89	9.00	6.00	11	246.48	Brain	LID not found	Brain
2770	810871	Hs.170482	AA484121	7.37	0.23	31.54	9.00	6.00	4	165.48	Forebrain	Brain	Eye
2772	547056	Hs.79101	AA095032	184.86	13.65	10.57	4.00	2.00	15	250.6	Liver	Skin	Thyroid
2774	51543	Hs.79226	H20758	20.17	1.00	13.54	12.00	6.00	19	382.99	Skin	Unilobal cord	Blood
2778	35185	Hs.89768	R24689	171.35	1.22	141.03	9.00	6.00	5	582.6	Peripheral ner	Head and nec	Nose
2780	385755	Hs.170157	AA025950	26.62	1.00	26.62	5.00	0.00	6	628.9	Small intestine	Liver	Pool
2780	199663	Hs.20144	R96663	8.60	1.00	8.60	0.00	2.00	12	470.09	Head and nec	Cervix	Gall bladder
2783	85509	Hs.110875	T71856	5.75	1.00	5.75	2.00	1.00	12	140.7	Ear	Unilobal cord	Smooth muscle
2786	843352	Hs.118005	AA489400	232.99	15.55	14.99	4.00	2.00	6	414.87	Pancreas	Lymph	Colon
2787	135083	Hs.110029	R33030	268.90	41.04	6.55	3.00	3.00	15	84.65	Pancreas	Cervix	Colon
2789	80374	Hs.1023	T95633	44.00	7.56	5.82	0.00	1.00	15	24.9	Ovary	Cervix	Pancreas
2791	82710	Hs.89562	T73468	211.14	7.87	26.82	14.00	6.00	21	179.54	Head and nec	Nose	Uterus
2793	843159	Hs.21704	AA488497	130.52	20.31	6.43	2.00	0.00	18	371.85	Synovial mem	Muscle	Cervix
2794	758662	Hs.5648	AA401853	42.98	8.49	5.06	1.00	0.00	X	330.2	Germ Cell	Prostate	Tonsil
2795	275871	Hs.179562	R93375	134.78	0.68	199.48	9.00	1.00	17	34.81	Orontum	Lymph	Larynx
2799	700527	Hs.26986	AA291163	42.21	4.40	9.60	9.00	1.00	10	75.69	Thymus	Synovial mem	Cervix
2801	526657	Hs.155202	AA133129	162.49	20.13	8.07	5.00	0.00	19	458.37	Small intestine	Forebrain	Muscle
2802	843028	Hs.155941	AA484068	9.55	0.41	23.50	9.00	5.00	10	508.36	Trachea	Synovial mem	Placenta
2805	773215	Hs.198191	AA425238	43.95	2.88	15.37	0.00	1.00	17	77.48	Adrenal gland	Head and nec	Nose
2807	841370	Hs.170197	AA487739	101.89	17.34	5.88	2.00	0.00	8	91.07	Unilobal cord	Gall bladder	Cervix
2808	200325	Hs.1244	H94929	65.08	9.05	7.19	3.00	0.00	10	362.25	Bone marrow	Nose	Aorta
2809	823470	Hs.168346	AA504348	98.93	19.63	5.04	1.00	0.00	19	421.94	Unilobal cord	Forebrain	Head and neck
2810	841617	Hs.125076	AA467681	517.46	54.66	9.47	6.00	0.00	12	160.78	Cervix	Colon	Blood
2811	212165	Hs.146354	H68845	203.40	38.68	5.26	1.00	0.00	3	619.8	Unilobal cord	Gall bladder	Thymus
2815	51702	Hs.597	H22856	47.23	5.04	9.37	1.00	0.00	1	155.48	CNS	Blood	Testis
2817	842846	Hs.8441	AA486280	109.50	18.87	5.80	2.00	0.00	16	126.05	Bone marrow	Breast	Adipose
2818	108208	Hs.148812	T69767	26.87	4.32	6.22	1.00	0.00	2	343.04	Thymus	Adipose	Thymus
2821	22731	Hs.1787	T75041	14.95	0.32	47.24	7.00	6.00	X	223.28	Gall bladder	Prostate	Placenta
2822	55093	Hs.93683	T74819	38.06	0.79	47.98	8.00	5.00	K	114.44	Skin	Bone	Placenta
2824	131385	Hs.170558	R23089	16.85	1.90	8.89	2.00	0.00	1	155.48	CNS	Blood	Testis
2829	703581	Hs.1908	AA378759	81.01	5.36	15.11	2.00	2.00	1	126.05	Bone marrow	Breast	Adipose
2834	841620	Hs.173381	AA487674	44.47	3.93	11.33	1.00	1.00	1	343.04	Thymus	Adipose	Thymus
2835	898073	Hs.74368	AA588787	21.74	0.47	46.46	9.00	6.00	2	223.28	Gall bladder	Prostate	Placenta
2837	612616	Hs.2942	AA173453	9.43	1.52	0.21	0.00	1.00	K	114.44	Skin	Bone	Placenta
2838	814054	Hs.16282	AA465479	5.26	1.00	5.28	0.00	2.00	1	155.48	CNS	Blood	Testis
2843	823794	Hs.2236	AA460263	22.12	3.46	6.39	1.00	0.00	1	126.05	Bone marrow	Breast	Adipose
2853	887788	Hs.75216	AA598513	154.03	11.83	13.25	2.00	1.00	1	343.04	Thymus	Adipose	Thymus
2854	512133	Hs.185840	AA125779	35.91	7.04	5.10	1.00	0.00	2	223.28	Gall bladder	Prostate	Placenta
2855	81289	Hs.77443	T60048	231.17	7.36	31.40	13.00	1.00	1	114.44	Skin	Bone	Placenta
2859	760231	Hs.77578	AA426237	122.84	17.07	7.20	1.00	0.00	1	155.48	CNS	Blood	Testis
2860	471196	Hs.111577	AA034213	73.56	7.87	9.34	3.00	4.00	1	126.05	Bone marrow	Breast	Adipose
2861	51041	Hs.123641	H18633	17.43	1.00	17.43	3.00	4.00	1	343.04	Thymus	Adipose	Thymus
2862	843016	Hs.75337	AA489528	78.27	12.73	6.16	1.00	0.00	10	470.52	Cervix	Skin	Note
2865	796000	Hs.76111	AA481065	6.89	0.39	17.55	5.00	2.00	3	458.65	Epidd/rms	Forebrain	Neural-
2867	48398	Hs.153752	H14343	16.20	1.60	10.13	7.00	0.00	20	11.08	Lymph	Adrenal gland	Whole embryo
2868	565493	Hs.91446	AA129877	11.20	0.78	14.42	9.00	6.00	17	300.65	Uterus	Aorta	Aorta
2873	783376	Hs.13046	AA453335	151.12	14.03	10.78	8.00	0.00	12	413.02	Cervix	Pooled	Forebrain

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2877	759164	Hs.100118	AA496013	23.65	3.41	6.93	0.00	3.00	3	164.53	Whole embryo	Pool	LID not found
2878	704697	Hs.15804	AA282253	13.21	1.70	7.78	0.00	1.00	4	463.66	Adrenal gland	Germ Cell	Tonsil
2881	122194	Hs.79150	T98594	7.17	0.56	12.87	9.00	8.00	4	673.58	Bone marrow	Cervix	Blood
2887	736155	Hs.23044	W00895	15.42	1.48	10.42	2.00	0.00	11	237.98	Colon	Breast	Blood
2895	130057	Hs.155223	R20865	28.02	2.30	12.60	8.00	0.00	5	637.06	Breast	Colon	Blood
2901	283398	Hs.8769	N57594	29.29	1.80	16.28	8.00	2.00	X	112.16	Small intestine	Spleen	Bone
2908	158270	Hs.210568	R72661	26.87	4.18	6.45	3.00	1.00	4	635.66	Testis	Pool	LID not found
2910	113264	Hs.2378	T83821	9.05	1.71	5.30	3.00	0.00	4	635.66	Pool	LID not found	Other
2920	207980	Hs.34107	H63503	9.74	1.88	5.18	3.00	0.00	4	635.66	Pool	LID not found	Other
2921	204737	Hs.93005	H57309	16.99	3.15	6.02	4.00	0.00	11	315.22	Breast	Pool	LID not found
2928	197637	Hs.200231	R87194	137.97	1.47	93.84	7.00	3.00	6	540.03	Forebrain	Skin	Blood
2930	163120	Hs.29438	H42897	41.26	3.72	11.09	12.00	0.00	11	315.22	Breast	Pool	LID not found
2945	232946	Hs.159840	H75599	40.71	2.72	14.68	10.00	2.00	6	540.03	Pool	LID not found	Other
2946	275802	Hs.14173	R93373	78.81	14.22	5.53	1.00	0.00	5	511.07	Pool	LID not found	Other
2947	127768	Hs.20181	R08890	35.47	5.47	6.49	1.00	0.00	5	366.2	Pool	LID not found	Other
2948	144085	Hs.29494	H78597	81.06	3.85	22.80	4.00	1.00	14	123	CNS	Gall bladder	Muscle
2951	251250	Hs.18350	H86534	5.67	0.35	16.08	8.00	5.00	7	208.72	Pool	Forebrain	Muscle
2951	289339	Hs.35096	N91101	31.10	4.71	6.61	1.00	0.00	1	85.46	Pool	LID not found	Other
2954	241539	Hs.14208	H90603	69.25	3.79	11.96	2.00	0.00	3	227.78	Pool	LID not found	Other
2960	194085	Hs.34197	R91004	24.84	1.72	14.48	14.00	0.00	X	88.99	Pool	LID not found	Other
2961	211202	Hs.205244	H87668	193.76	28.32	6.84	2.00	0.00	12	78.04	Esophagus	Aorta	Piscicola
2963	230224	Hs.124777	H93463	5.51	0.81	6.81	1.00	3.00	16	408.31	Cervix	Breast	Germ Cell
2965	246586	Hs.21858	N59721	361.44	4.06	93.87	22.00	5.00	7	523.34	Bone marrow	Stomach	Germ Cell
2978	810878	Hs.80441	H73947	43.67	5.43	8.05	1.00	1.00	1	13.77	Trachea	Germ Cell	Bone
2982	232769	Hs.6444	AA458973	26.09	5.08	5.13	0.00	1.00	X	448.88	Nose	Umbilical cord	Liver
2987	771058	Hs.6315	AA427398	10.16	1.33	7.05	1.00	0.00	3	671.23	Neural	Adipose	Pool
2990	214614	Hs.173242	H73661	35.78	3.84	9.31	3.00	2.00	5	158.34	Muscle	Stomach	Bone
2992	810772	Hs.177533	AA463928	25.95	3.27	7.93	5.00	5.00	16	448.98	Pancreas	Eye	Uterus
2994	295389	Hs.125180	W05000	74.27	14.77	5.03	1.00	0.00	8	117.06	Nose	Head and neck	Breast
2996	809850	Hs.0518	AA455108	41.81	0.10	418.12	9.00	6.00	3	191.53	Whole embryo	Tonsil	LID not found
3003	327220	Hs.160178	AA284268	5.33	0.38	14.92	3.00	3.00	4	635.64	Pool	Kidney	LID not found
3008	810448	Hs.10849	AA457116	45.59	8.92	8.59	1.00	0.00	17	322.97	Pool	LID not found	Other
3011	609367	Hs.179986	AA456611	27.81	0.53	52.30	9.00	6.00	3	402.8	Pool	LID not found	Other
3015	753332	Hs.164481	AA404278	56.84	5.47	15.39	5.00	1.00	8	404.82	Pool	LID not found	Other
3021	243317	Hs.205572	H85086	161.20	28.57	5.84	1.00	0.00	17	300.85	Uterus	Pool	Aorta
3023	214583	Hs.138580	H71224	23.34	2.97	7.85	2.00	0.00	10	475.24	Neural	Pool	LID not found
3025	243784	Hs.205378	N76673	46.42	6.10	7.61	2.00	0.00	1	777.37	Small intestine	Head and neck	Aorta
3030	245524	Hs.83516	N77321	6.35	1.25	5.05	1.00	0.00	15	227.19	Smooth muscle	Cervix	Pancreas
3035	480140	Hs.81448	AA136040	19.55	1.00	19.55	2.00	2.00	14	218.37	Thyroid	Breast	Pool
3043	811006	Hs.50940	AA485355	5.23	0.25	20.86	7.00	6.00	13	128.62	Ear	Stomach	Aorta
3048	358539	Hs.11270	AA015607	12.28	1.00	12.28	2.00	0.00	17	460.37	Adrenal gland	Pool	LID not found
3050	214331	Hs.28523	H77855	13.38	1.61	8.31	4.00	0.00	5	412.25	Ear	Germ Cell	Breast
3055	268951	Hs.206854	N26672	58.66	11.47	5.20	1.00	0.00	10	90.72	Brain	Testis	Lung
3061	982694	Hs.160201	AA447594	37.14	4.87	7.63	1.00	0.00	8	65.2	Parathyroid	Nose	CNS
3062	247618	Hs.154424	AA018134	113.95	22.03	5.17	1.00	0.00	19	-2.33	Tonsil	Ovary	Skin
3063	247618	Hs.63785	N58145	75.04	5.06	14.75	13.00	0.00	12	45.09	Epididymis	Larynx	Skin
3067	126277	Hs.152659	R06284	12.84	1.97	6.53	1.00	0.00	7	Head and neck	Bone		
3067	130032	Hs.119325	R19289	8.49	1.01	8.45	2.00	0.00	1				
3068	782283	Hs.6738	AA422248	18.29	3.56	5.15	0.00	1.00					
3070	132140	Hs.93961	R26163	27.94	3.38	8.27	2.00	0.00					
3071	186094	Hs.181374	R88764	17.51	0.19	93.09	9.00	4.00					
3074	368693	Hs.101047	AA028102	13.64	0.60	22.82	2.00	4.00					
3075	810743	Hs.79026	AA480935	26.43	3.28	6.06	1.00	0.00					
3078	230205	Hs.119007	H93459	26.89	0.10	268.88	9.00	6.00					
3080	410930	Hs.62461	AA032080	7.01	1.00	7.01	1.00	0.00					

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3082	755821	Hs.83469	AA466578	117.30	13.90	8.44	2.00	1.00	7	Neural	Esophagus	Forebrain
3084	548857	Hs.189921	AA115919	123.77	0.00	12376722.58	14.00	1.00	2	Epididymis	Small intestine	Lymph node
3085	130221	Hs.144137	H00677	11.15	0.24	46.73	6.00	6.00	2	Testis	Testis	Pool
3090	823964	Hs.84232	AA490860	10.94	1.57	6.97	1.00	1.00	22	Germ Cell	Testis	Breast
3095	140718	Hs.192966	R87042	15.20	1.93	7.87	1.00	0.00	7	Pooled	CNS	Parathyroid
3099	80146	Hs.11383	T84134	55.84	8.08	6.91	5.00	2.00	17	Whole embryo	Germ Cell	-
3100	213136	Hs.75462	H68582	6.00	1.00	6.00	0.00	1.00	5	Adipose	Nose	Thymus
3107	203240	Hs.81988	H54688	23.70	3.18	7.46	7.00	0.00	1	Cervix	Pituitary	Forebrain
3108	45284	Hs.181304	H09461	5.76	1.00	5.76	0.00	3.00	13	Aorta	Brain	Whole embryo
3110	127841	Hs.99390	H08879	31.57	3.00	10.54	7.00	0.00	1	Breast	Pool	Kidney
3116	175123	Hs.30380	H39192	10.28	2.48	6.56	0.00	2.00	17	Uterus	Pituitary	-
3118	340630	Hs.248	W56189	180.68	14.03	12.60	9.00	0.00	10	Umbilical cord	Blood	Breast
3127	295255	Hs.78906	N75979	34.79	2.54	13.88	0.00	1.00	11	Eye	Bone	Tonsil
3130	810512	Hs.87409	AA464630	21.20	1.79	11.85	2.00	1.00	15	Bone	Gall bladder	Umbilical cord
3134	813742	Hs.90572	AA453789	34.82	2.83	12.21	0.00	1.00	6	Spleen	Heart	Lung
3138	205185	Hs.2030	H59891	40.60	1.00	40.60	6.00	3.00	20	Spleen	Uterus	Pituitary
3144	42118	Hs.9810	R60722	7.81	0.32	24.75	7.00	8.00	12	Whole embryo	Parathyroid	Kidney
3146	795178	Hs.69881	AA453989	38.82	4.11	8.90	7.00	0.00	11	Testis	Germ Cell	Pool
3148	810974	Hs.3068	AA458932	47.14	7.70	6.12	2.00	0.00	11	CNS	Gall bladder	Forebrain
3154	241530	Hs.171598	H84481	38.66	4.00	9.17	1.00	0.00	1	Nose	Pituitary	Stomach
3155	223772	Hs.36102	H77722	441.27	23.40	16.86	3.00	2.00	16	Pool	LID not found	Other
3156	193990	Hs.1710	R33875	22.77	3.93	5.80	2.00	0.00	13	Bone	Lymph	Pool
3160	377152	Hs.10738	AA055101	119.71	7.20	16.63	8.00	0.00	5	Heart	Gall bladder	-
3164	35077	Hs.21639	R25020	224.33	1.07	20.60	9.00	6.00	2	Lymph	Prostate	Brain
3170	840942	Hs.814	AA486527	30.39	3.31	9.18	1.00	4.00	6	Nose	Thymus	Smooth muscle
3171	840404	Hs.195117	AA485553	41.68	5.56	7.49	6.00	1.00	14	Ear	Pooled	Blood
3173	246765	Hs.73848	N53188	55.02	10.13	5.43	1.00	0.00	11	Liver	Spleen	Pool
3174	813266	Hs.75329	AA456394	31.44	3.85	8.16	2.00	1.00	X	Muscle	-	Uterus
3175	814270	Hs.91728	AA458994	27.13	4.87	5.82	1.00	0.00	4	Thyroid	Thyroid	Tonsil
3183	410833	Hs.7557	W86653	18.89	3.20	5.91	1.00	0.00	6	Gall bladder	Thyroid	Muscle
3184	155575	Hs.26395	R71669	18.14	2.02	8.43	0.00	1.00	20	Peripheral	nerve	Ovary
3185	240668	Hs.75546	H84153	7.63	0.10	78.27	2.00	6.00	12	Adrenal gland	Thyroid	Heart
3186	714322	Hs.159533	T87813	10.21	1.00	10.21	2.00	3.00				
3187	770570	Hs.12971	AA434130	12.04	1.95	6.17	1.00	0.00				
3189	38374	Hs.103812	R23785	8.30	0.58	14.32	2.00	4.00	12	Esophagus	Cervix	Umbilical cord
3194	842869	Hs.77385	AA488348	1019.44	99.12	10.29	4.00	3.00	3	Epididymis	Marrow	Bone marrow
3195	487118	Hs.587	AA045320	45.21	4.23	10.70	11.00	3.00	X	Small intestine	Pooled	Pool
3197	178818	Hs.198210	H49455	9.91	1.00	9.91	0.00	1.00	3	Prostate	Muscle	Brain
3198	49154	Hs.106874	H09085	10.15	0.88	11.59	2.00	0.00	3	Thyroid	Adipose	Spleen
3205	533873	Hs.74284	AA101289	22.88	1.00	22.88	6.00	4.00	5	Forebrain	Esophagus	Thymus
3206	843078	Hs.168901	AA483998	37.30	5.01	7.45	1.00	0.00	10	Forebrain	Cervix	Adrenal gland
3208	510760	Hs.202860	AA102035	30.18	5.58	5.41	1.00	0.00	1	Nose	Adipose	CNS
3209	28474	Hs.83114	R13434	26.18	5.53	5.10	1.00	1.00	1	Small intestine	Smooth muscle	Gall bladder
3210	704760	Hs.78881	AA282642	12.32	1.00	12.32	1.00	3.00	19	Ignore	Tonsil	Blood
3211	795543	Hs.83383	AA458663	130.35	17.93	7.27	2.00	0.00	11	Stomach	Gall bladder	Aorta
3226	485889	Hs.157319	AA040170	137.15	2.59	32.89	23.00	6.00			Liver	-
3229	666879	Hs.97268	AA252968	135.92	2.70	51.39	22.00	6.00			Larynx	Prostate
3230	840702	Hs.124027	AA488081	56.64	11.07	5.12	1.00	0.00	10	Synovial mem	Skin	Heart
3231	887584	Hs.75104	AA488837	41.69	0.58	71.34	9.00	6.00	12	Whole embryo	Brain	Esophagus
3233	24884	Hs.143434	R38996	16.66	0.84	19.83	10.00	6.00	6	Thymus	Adipose	Pool
3234	805598	Hs.73932	AA442084	31.29	4.54	8.90	3.00	0.00	6	Omentum	Skin	Parathyroid
3237	49352	Hs.78837	H15504	169.03	19.25	8.76	4.00	0.00	10	Smooth muscle	Pituitary	Blood
3239	828166	Hs.92508	AA521422	30.07	5.01	6.00	1.00	0.00	15	Smooth muscle	Muscle	Whole embryo
3240	788421	Hs.75962	AA456439	41.97	8.23	5.10	1.00	0.00			Gall bladder	CNS
3241	247810	Hs.1281	N73030	55.87	9.03	5.97	2.00	0.00	9	Bone	CNS	Spleen
3244	888286	Hs.184572	AA458874	89.00	4.62	19.27	6.00	0.00			Synovial mem	Lymph
3245	755506	Hs.77840	AA419108	103.93	12.45	8.75	0.00	1.00	2	Stomach	Nose	Gall bladder

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3246	746321	Hs.203146	AA481397	22.67	2.73	8.30	10.00	1.00	16	89.33	Tonsil	Lymph	Breast
3250	824547	Hs.169746	AA480920	19.55	0.00	1955112.17	14.00	0.00	7	946.17	Adipose	Thyroid	Bone
3252	841064	Hs.74034	AA487560	187.19	4.31	38.61	19.00	2.00	9	252.77	Omentum	Thyroid	Smooth muscle
3253	209716	Hs.4437	AA486919	527.22	8.36	62.89	9.00	1.00	19	284.08	Head and nec	Parathyroid	Thyroid
3254	841044	Hs.38913	AA451781	215.56	2.39	90.38	9.00	6.00	8	118.53	Gall bladder	Ovary	CNS
3259	788745	Hs.183805	AA484755	63.85	7.70	8.29	3.00	4.00	8	172.5	Spleen	Umbilical cord	Muscle
3261	810625	Hs.76064	AA509178	6.65	1.00	6.65	2.00	4.00	11	39.9	Testis	Colon	Bone marrow
3262	949940	Hs.145061	798708	861.91	76.67	11.24	2.00	1.00	4	203.08	Pituitary	Testis	Heart
3267	121329	Hs.103545	R31738	6.92	1.00	6.92	16.00	0.00	4	380.27	Pituitary	LID not found	Brain
3268	134629	Hs.103545	R31738	19.68	0.00	1864926.32	6.00	0.00	12	246.56	Adipose	Pituitary	Other
3271	190714	Hs.16917	R92577	12.55	0.33	38.18	9.00	0.00	10	411.43	Adipose	Pituitary	Pool
3272	207098	Hs.34482	H48592	307.87	0.84	367.03	9.00	6.00	2	108.44	Pituitary	Pituitary	Brain
3273	246073	Hs.173734	N55563	72.28	9.20	7.86	2.00	0.00	19	-10.87	Skin	Pituitary	LID not found
3285	292452	Hs.34501	N68424	76.98	10.14	7.59	2.00	0.00	4	551.74	Pituitary	LID not found	Other
3290	66420	Hs.189713	R16069	48.53	5.96	6.14	5.00	0.00	4	499.2	Germ Cell	Testis	Heart
3295	211024	Hs.193981	H65775	28.50	1.96	18.30	3.00	1.00	4	337.82	CNS	Head and nec	Adipose
3298	139764	Hs.172780	R52241	108.10	12.64	6.40	0.00	4.00	8	366.88	Cervix	Eye	Adipose
3307	121412	Hs.17819	R6909	43.81	4.71	9.28	3.00	1.00	11	367.45	Gall bladder	Cervix	Eye
3312	139490	Hs.28312	R64580	165.79	2.57	60.52	14.00	0.00	6	358.88	Adrenal gland	Thyroid	Bone
3317	358162	Hs.23642	W95346	5.20	0.78	6.64	3.00	4.00	4	438.12	Pool	LID not found	Other
3321	35191	Hs.118684	R24974	71.62	9.11	7.86	1.00	0.00	5	373.94	Kidney	Pituitary	Pool
3328	138978	Hs.203338	R67502	11.39	1.42	8.02	2.00	0.00	8	117.02	Smooth muscle	Gall bladder	Pituitary
3332	135450	Hs.203365	R32751	87.58	19.65	5.16	1.00	0.00	3	326.53	Eye	Lung	Parathyroid
3337	206993	Hs.00657	H63455	24.53	4.63	5.09	1.00	0.00	3	451.05	Pool	Eye	Heart
3338	740554	Hs.203914	AA478781	32.88	4.67	6.62	3.00	0.00	17	272.44	Pool	LID not found	Other
3342	142944	Hs.10784	R71124	24.90	3.82	6.52	4.00	1.00	1	165.59	Parathyroid	Nose	Breast
3346	151281	Hs.5143	H02308	27.17	2.25	12.06	5.00	0.00	15	283.15	Pool	Cervix	Forebrain
3352	138937	Hs.178534	R62773	68.41	2.23	30.74	9.00	6.00	4	444.57	Head and nec	Thymus	Eye
3357	469704	Hs.27023	AA028034	8.84	0.53	16.55	3.00	3.00	2	500.02	Umbilical cord	Spleen	Lymph
3360	138974	Hs.28387	R62868	22.11	1.41	15.68	14.00	0.00	9	135.66	Lung	Head and nec	Adipose
3362	296754	Hs.49111	W04206	6.21	1.00	6.21	1.00	0.00	8	490.97	Skin	Gall bladder	Colon
3365	204098	Hs.206380	H54897	55.80	0.00	5559802.21	14.00	0.00	8	305.96	Brain	Uterus	Parathyroid
3368	295324	Hs.53350	W04231	79.49	7.81	10.16	2.00	0.00	17	348.77	Tonsil	LID not found	Germ Cell
3371	143169	Hs.183576	R75872	18.27	1.86	9.71	8.00	1.00	11	134.94	Pool	LID not found	Other
3374	232214	Hs.53468	H75909	116.64	16.37	7.13	2.00	0.00	4	123.1	Eye	Cervix	Ear
3378	285723	Hs.49275	W60890	63.35	8.75	7.24	2.00	0.00	21				
3385	296010	Hs.210787	N67041	78.50	14.63	5.37	2.00	0.00					
3393	200418	Hs.35701	R97234	23.48	1.87	12.53	14.00	0.00					
3397	203805	Hs.177279	H56424	14.15	2.62	5.40	2.00	0.00					
3401	245366	Hs.78465	W68155	91.42	3.37	27.26	1.00	1.00					
3404	180840	Hs.108802	H38088	12.82	1.20	10.72	7.00	0.00					
3407	380620	Hs.25363	AA056325	9.02	1.54	5.86	1.00	0.00					
3412	758356	Hs.18442	AA04288	9.57	0.96	9.87	6.00	5.00					
3413	244310	Hs.37389	N75715	11.96	1.32	9.09	8.00	0.00					
3414	253356	Hs.137637	N92034	96.84	16.84	5.75	2.00	0.00					
3419	121251	Hs.103834	T96718	108.31	15.04	7.20	3.00	0.00					
3420	344555	Hs.11184	W73607	54.87	10.23	5.36	2.00	0.00					
3431	417228	Hs.79070	W87741	55.74	7.44	7.49	4.00	0.00					
3432	1031049	Hs.1176	AA608480	8.12	1.00	8.12	1.00	2.00					
3436	480815	Hs.21635	AA126780	48.75	7.31	6.39	6.00	0.00					
3437	204559	Hs.37388	H56981	51.27	9.80	5.23	1.00	0.00					
3439	428231	Hs.127769	AA002126	20.35	2.87	7.09	3.00	0.00					
3441	268781	Hs.172282	R88074	12.65	2.18	5.76	2.00	0.00					
3442	297437	Hs.197008	W03686	43.11	6.49	6.64	2.00	0.00					
3446	323371	Hs.177485	W42849	69.97	2.77	25.22	8.00	0.00					

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3455	448190	Hs.75283	AA702174	48.75	7.81	6.37	4.00	0.00	10	374.1	Lymph	Breast	Brain
3456	759645	Hs.76473	AA420738	11.00	2.14	5.14	1.00	0.00			Aorta	Breast	Whole embryo
3457	169232	Hs.182965	H43711	20.39	1.57	13.00	1.00	2.00			Bone marrow	Skin	Breast
3458	183417	Hs.187173	H45617	35.02	3.35	10.46	3.00	0.00	10	114.88	Uterus	Aorta	Brain
3459	196348	Hs.30841	R82452	8.58	0.15	56.97	3.00	0.00		695.02	Small intestine	Thyroid	Parathyroid
3460	134270	Hs.24385	F31188	24.16	4.57	5.29	0.00	1.00	1	325.76	Stomach	Breast	Germ Cell
3461	183462	Hs.26232	H45455	6.82	1.29	5.26	1.00	0.00	17	673.49	Forelimb	Bone	Tonsil
3472	756480	Hs.111039	AA436406	7.11	0.07	107.30	7.00	5.00	4			Pool	Codon
3478	45138	Hs.78141	H07991	81.22	1.70	47.65	22.00	5.00		68.93	Thyroid	CNS	Brain
3483	248531	Hs.5358	N59784	90.45	11.59	5.22	2.00	0.00	12	738.14	CNS	Eye	Gall bladder
3486	810600	Hs.174070	AA464729	50.55	5.78	8.73	4.00	0.00	X	213.22	Nose	Adipose	Larynx
3487	23831	Hs.155247	T77281	125.72	9.86	12.75	10.00	0.00		142.59		Adipose	Nose
3488	756443	Hs.780	AA495838	188.35	5.13	36.70	12.00	2.00	14	134.69	Whole embryo	Germ Cell	Muscle
3489	131352	Hs.79351	N62620	24.35	1.00	24.35	0.00	2.00	7	554.6	Forelimb	Pool	Placenta
3490	809688	Hs.70338	R22977	128.15	12.88	9.96	5.00	1.00	20	212.78	Placenta	Lymph node	Aorta
3512	753467	Hs.7594	AA408651	18.44	3.07	6.33	2.00	2.00	15	42.18	Kidney	Brain	Whole embryo
3520	173228	Hs.151413	H22652	81.66	8.83	6.98	1.00	0.00	9	373.87	Adipose	Umbilical cord	Nose
3522	754509	Hs.35379	AA410691	6.58	1.00	6.56	0.00	1.00	X	354.25	Thyroid	CNS	Liver
3526	199945	Hs.8265	R87085	44.83	2.10	21.37	10.00	1.00	X	88.98	Aorta	Blood	Eye
3527	40846	Hs.26466	R55789	5.77	0.70	8.22	3.00	2.00	1	182.28	Larynx	Head and neck	Esophagus
3528	216950	Hs.80567	H72027	107.43	4.30	25.00	0.00	2.00		Esophagus	Bone	CNS	
3530	296880	Hs.1861	V01240	20.92	1.00	15.75	1.00	3.00	1	129.43	Umbilical cord	Heart	Brain
3540	234237	Hs.23562	AA434810	23.97	4.37	5.48	2.00	0.00	2	176.5	Nose	Tonsil	Thyroid
3546	809838	Hs.23562	AA434810	37.36	1.00	37.36	7.00	6.00	17	385.19	Blood	Placenta	Tonsil
3547	809888	Hs.78819	AA455600	68.83	3.25	20.59	7.00	0.00	3	449.08	Cervix	Synovial mem	Nose
3553	784124	Hs.78824	AA432052	10.21	0.12	8.18	4.00	0.00	X	80.62	Pool	Thyroid	Tonsil
3554	824117	Hs.82771	AA430817	15.75	1.00	15.75	1.00	0.00	6	142.08	Lymph node	Umbilical cord	Uterus
3555	841331	Hs.79849	AA487643	6.75	0.37	18.48	6.00	6.00	5	497.93	Synovial mem	Ear	Uterus
3557	774555	Hs.2903	AA403562	5.75	0.10	57.51	7.00	6.00	8	102.98	Thyroid	Cervix	Placenta
3558	809530	Hs.57101	AA454572	7.19	1.25	5.77	1.00	0.00	2	473.05	Aorta	Brain	Germ Cell
3559	703479	Hs.78811	AA4278240	14.89	1.84	8.12	2.00	0.00	6	902.7	Umbilical cord	Esophagus	Umbilical cord
3560	308380	Hs.177778	W19653	18.41	1.14	16.10	2.00	0.00	22	17.11	Ignore	CNS	Stomach
3562	724387	Hs.1063	AA411107	66.40	8.91	7.79	1.00	0.00	19	102.24	Placenta	Pool	Pancreas
3563	754358	Hs.8122	AA436142	76.01	3.85	20.83	22.00	4.00	15	215.11	Eye	Lung	Germ Cell
3565	690590	Hs.178974	AA539793	71.21	7.71	9.23	7.00	0.00	5	501.76	Thymus	Nose	Cervix
3566	825271	Hs.189954	AA504442	17.56	2.37	7.43	1.00	0.00	9	10.86	Thyroid	Blood	Whole embryo
3567	784772	Hs.768	AA478542	74.80	2.80	28.75	13.00	0.00	13	278.23	Nose	CNS	Placenta
3569	52327	Hs.172350	H23459	17.72	2.02	8.77	1.00	0.00	3	547.64	Cervix	Gall bladder	Small intestine
3570	788832	Hs.118577	AA450062	48.77	6.00	8.13	1.00	2.00	X	136.23	Adrenal gland	Brain	Breast
3572	66535	Hs.74563	T67029	31.27	3.39	9.22	4.00	0.00	8	35.88		Lung	Blood
3573	850445	Hs.91773	AA590932	231.59	26.42	8.78	6.00	0.00	8	46.18	Testis	Lung	Pool
3574	811830	Hs.2471	AA454662	29.66	5.87	5.05	1.00	0.00	2	682.78	Esophagus	Muscle	Brain
3575	795173	Hs.69743	AA453978	37.87	6.28	6.03	1.00	0.00	27	86.07	Ignore	Muscle	Stomach
3577	840567	Hs.3307	AA407093	399.15	36.94	10.53	8.00	5.00	7	535.87	Neural	Stomach	Breast
3578	45099	Hs.77884	H05140	13.33	0.80	22.41	7.00	5.00	1	153.86	Peripheral ner	Adrenal gland	Liver
3579	565235	Hs.89718	AA138125	84.27	13.72	6.14	1.00	0.00	8	489.22	Larynx	Peripheral ner	Nose
3583	781738	Hs.180705	AA431631	42.93	1.49	28.81	18.00	6.00	5	155.62	Small intestine	Liver	
3584	127682	Hs.20364	R09565	25.28	3.56	7.09	1.00	0.00	X	211.15	Eye	Whole embryo	Eye
3585	612274	Hs.75318	AA180912	630.81	120.98	5.21	1.00	0.00				Tonsil	Forelimb
3586	35191	Hs.116684	R24974	76.75	9.85	7.95	1.00	0.00					
3587	783459	Hs.148098	AA448289	11.20	0.23	48.39	8.00	5.00					
3589	696683	Hs.77439	AA181500	97.97	6.29	9.22	6.00	1.00					
3590	840878	Hs.165136	AA482324	384.35	24.69	15.67	6.00	2.00					
3594	842853	Hs.75749	AA489281	52.98	1.00	52.98	0.00	2.00					
3603	530914	Hs.3314	AA070228	187.57	5.39	33.54	1.00	3.00					
3605	897889	Hs.152292	AA496810	30.32	0.10	305.19	7.00	6.00					
3608	814319	Hs.170186	AA458109	22.45	4.11	5.48	1.00	0.00					

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3607	840384	Hs.79295	AA485773	348.21	32.35	10.76	6.00	2.00	4	404.35	Eye	Thymus	Tonsil
3611	840821	Hs.102135	AA486261	80.24	4.90	17.83	3.00	6.00	X	351.05	Lymph node	Nose	Skin
3613	155434	Hs.181309	R71913	210.13	25.26	9.31	1.00	0.00	7	189.12	Head and nec	Parathyroid	Smooth muscle
3614	686172	Hs.77695	AA252211	36.50	6.15	5.93	4.00	0.00		63.51	Head and nec	Lymph	Tonsil
3619	753700	Hs.57304	AA411640	115.60	22.16	5.22	1.00	0.00	9	607	Esophagus	Synovial men	Adipose
3625	711116	Hs.170279	T47454	38.99	3.77	10.34	11.00	0.00	2	540.03	Lymph node	Umbilical cord	Placenta
3628	76869	Hs.80167	T51162	9.45	0.38	24.61	9.00	6.00		249.31	Ear	Nose	Ovary
3628	840776	Hs.159640	AA486082	126.54	3.47	36.50	7.00	3.00	6	540.03	Small intestine	Parathyroid	CNS
3628	137638	Hs.108642	R37724	27.37	3.04	8.99	0.00	1.00	10	67.65	Prostate	Adipose	Tonsil
3629	824568	Hs.171995	AA490361	14.10	0.41	34.04	7.00	0.00	19	82.48	CNS	Whole embryo	Heart
3630	773189	Hs.37266	AA426473	28.97	2.10	13.80	1.00	1.00	12	485.55	Placenta	Muscle	Parathyroid
3632	205649	Hs.11676	H57494	24.34	1.52	14.07	4.00	0.00	3	485.55	Omentum	Placenta	Umbilical cord vein
3633	726086	Hs.78045	AA389473	1272.44	6.53	194.92	22.00	5.00	7	490.45	Gall bladder	Forebrain	Germ Cell
3634	52646	Hs.156814	H29592	16.76	2.45	6.64	3.00	0.00	15	146.37	Neural	Forebrain	Teslis
3635	826459	Hs.80324	AA521083	122.99	23.88	5.16	1.00	0.00		139.84	Smooth muscle	Lung	
3637	363569	Hs.199248	AA018986	40.63	0.10	406.30	7.00	6.00	5	741.81	Umbilical cord	Larynx	Aorta
3641	840768	Hs.76293	AA466085	1143.88	20.70	55.27	3.00	1.00	2	287.38	Umbilical cord	Uterus	Forebrain
3642	813628	Hs.23311	AA447773	9.56	1.00	9.56	0.00	1.00	6	685.13	Parathyroid	Uterus	Pancreas
3660	563821	Hs.20736	AA102634	6.06	0.00	506344.69	10.00	0.00	1	157.21	Whole embryo	Thyroid	Kidney
3664	195358	Hs.34228	R69539	23.61	1.00	23.61	7.00	5.00	X	157.21	Esophagus	Thyroid	Pooled
3669	358758	Hs.55523	V64438	33.08	3.62	9.15	4.00	0.00	X	354.68	Pool	LID not found	Other
3672	195381	Hs.181857	R68989	29.51	1.00	29.51	9.00	6.00	10	569.13	CNS	Pool	Teslis
3674	234316	Hs.174680	H65238	51.27	6.29	8.16	2.00	0.00	6	473.57	Pooled	Breast	Uterus
3675	123635	Hs.114055	R27432	12.06	1.82	6.64	1.00	0.00	5	157.21	Nose	Aorta	Stomach
3676	143887	Hs.154737	R76394	51.12	5.69	8.86	4.00	0.00	X	586.57	Bone	Parathyroid	Eye
3677	366570	Hs.59523	AA027160	39.84	3.76	10.61	4.00	0.00	7	283.83	Pool	LID not found	Other
3681	144891	Hs.7753	R75585	437.18	62.97	8.25	11.00	2.00		283.83	Pool	Placenta	Thymus
3685	156553	Hs.24889	R91821	11.20	1.42	7.89	4.00	0.00	21	31.88	Neural	Pool	Lung
3688	195553	Hs.177106	R91821	11.20	1.42	7.89	4.00	0.00		249.15	Pool	LID not found	Other
3692	154477	Hs.30120	R54855	10.84	2.09	5.09	1.00	0.00		685.3	Small intestine	Bladder	Ear
3697	321169	Hs.156764	V653015	228.11	44.27	5.17	1.00	0.00		12.22	Placenta	Tonsil	Aorta
3700	244239	Hs.39151	R75715	20.92	1.00	20.92	6.00	6.00	20	511.27	Peripheral nerve	Nose	Pooled
3701	128509	Hs.171917	R10570	29.34	4.49	6.84	4.00	0.00	1	85.85	Ignore	Larynx	Umbilical cord
3704	242011	Hs.34262	H63319	63.22	5.35	11.82	3.00	0.00	22	572.93	Placenta	Uterus	Colon
3709	307532	Hs.173912	V621081	72.78	12.73	5.72	1.00	0.00	3	330.2	Colon	Colon	LID not found
3712	195784	Hs.34268	R89285	25.92	2.34	11.06	3.00	1.00	19	425.57	Pool	Kidney	LID not found
3721	130100	Hs.206087	R21415	25.34	4.31	6.58	3.00	0.00		477.19	Parathyroid	Blood	Eye
3727	130801	Hs.23330	R22065	28.02	5.77	6.03	1.00	0.00	7	118.93	Pooled	Forebrain	Uterus
3729	341269	Hs.102447	V650000	8.19	0.34	24.41	5.00	4.00		742.57	Whole embryo	Teslis	Germ Cell
3733	842980	Hs.115242	AA488468	44.39	7.56	5.87	2.00	1.00	22	164.89	Eye	Thyroid	Brain
3735	130747	Hs.168797	R22136	9.74	1.57	6.21	1.00	0.00	5	508.81	CNS	Forebrain	Aorta
3737	825470	Hs.156346	AA504348	95.30	0.49	194.62	6.00	0.00	17	369.68	CNS	Stomach	Blood
3739	127710	Hs.191308	R09498	98.35	13.87	7.09	3.00	1.00	4	457.8	Forebrain	Pooled	CNS
3744	299637	Hs.34259	N94167	22.20	2.08	10.59	14.00	0.00		628.9	Teslis	Pool	LID not found
3747	257391	Hs.172700	N50706	50.87	0.10	606.55	6.00	6.00	10	320.62	Umbilical cord	Cervix	Forebrain
3748	501430	Hs.6774	AA115248	22.26	2.81	8.54	2.00	1.00	2		Ear	Stomach	Bone
3748	1945140	Hs.169603	N71647	8.81	0.00	80856.85	14.00	0.00	2				
3755	194524	Hs.14888	R86333	87.50	11.38	7.69	3.00	0.00					
3756	246194	Hs.125422	N77008	50.38	1.76	31.63	8.00	6.00	16				
3759	299197	Hs.6349	N75498	5.15	0.81	5.65	2.00	0.00					
3760	356635	Hs.11567	V64612	7.10	0.39	18.17	8.00	6.00	10				
3765	121727	Hs.42386	T88162	39.30	2.23	17.59	17.00	2.00					
3773	282860	Hs.42840	N45139	20.23	3.65	5.55	1.00	0.00	17				
3781	300972	Hs.42548	V60745	18.67	3.72	5.02	1.00	0.00	18				
3782	248545	Hs.64107	N59772	129.73	1.00	129.73	22.00	6.00	6				
3783	250595	Hs.76053	N73611	13.46	1.90	7.09	2.00	0.00	13				
3784	785277	Hs.11611	AA454021	12.86	1.00	12.86	1.00	2.00					

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3789	309045	Hs 165169	N95371	30.38	3.08	9.92	3.00	0.00	3	191.53	Adipose	Muscle	Uterus
3791	504979	Hs 6727	AA161214	21.65	2.54	8.50	4.00	0.00	4	437.35	Gall bladder	Pool	LID not found
3798	293564	Hs 84148	N94143	11.62	2.14	5.43	0.00	1.00	18	474.57	Pool	LID not found	Other
3801	213535	Hs 205015	H72259	14.24	1.87	7.81	2.00	0.00	3	584.72	Adipose	Kidney	CNS
3802	309583	Hs 82547	N94424	85.89	2.45	34.99	13.00	6.00	18	584.72	Adipose	Pool	LID not found
3806	293835	Hs 94168	N95107	18.39	3.07	5.99	0.00	1.00	22	17.11	Colon	Kidney	Brain
3827	771013	Hs 181341	AA427573	5.53	0.11	51.73	7.00	6.00	19	66.07	Epididymis	Brain	Heart
3830	297919	Hs 94228	N70072	35.59	3.68	9.73	3.00	0.00	11	227.3	Relina	Cervix	Pooled
3832	782503	Hs 12214	AA431773	31.07	4.07	7.03	5.00	0.00	15	239.57	Lymph	Tonsil	Prostate
3835	307084	Hs 198186	N83686	6.50	0.27	24.31	5.00	2.00	20	542.75	Eye	Breast	Parathyroid
3842	526282	Hs 77783	AA078778	24.02	0.19	126.80	4.00	5.00	14	280.34	Foreskin	Spleen	Thyroid
3848	243675	Hs 182007	N50014	91.43	8.55	10.70	3.00	1.00	12	298.19	Small intestine	Eye	Colon
3850	210697	Hs 69472	H66116	12.44	1.08	11.45	3.00	0.00	3	577.65	CNS	Eye	CNS
3854	321661	Hs 171734	V922643	53.11	8.85	5.39	1.00	0.00	6	116.42	Adrenal gland	Ear	Pooled
3856	509731	Hs 84072	AA045698	33.35	2.76	12.08	6.00	3.00	8	116.42	Adrenal gland	Lymph	Cervix
3859	50158	Hs 66384	H17156	52.47	7.43	8.07	4.00	1.00	1	553.94	Placenta	Stomach	Testis
3864	360213	Hs 172471	AA013084	8.24	1.20	8.87	1.00	0.00	1	266.93	Esophagus	Adrenal gland	Heart
3866	357031	Hs 29352	V93183	76.02	2.07	37.16	2.00	6.00	21	13.47	Epididymis	Aorta	Stomach
3874	191603	Hs 179681	H37969	429.13	61.91	6.93	2.00	0.00	6	237.41	Nose	Small intestine	Adipose
3876	727792	Hs 41717	AA393408	5.84	1.00	5.84	0.00	2.00	19	255.2	Small intestine	Foreskin	Adrenal gland
3882	668007	Hs 62276	AA258735	26.53	2.63	10.08	2.00	1.00	11	18.43	Stomach	Parathyroid	Ovary
3883	178483	Hs 198831	H46553	24.47	2.77	6.84	7.00	0.00	14	475.02	Foreskin	Cervix	Eye
3890	768370	Hs 204354	AA485546	164.45	8.49	19.38	6.00	3.00	10	627.13	Lung	Heart	Pituitary
3898	136821	Hs 1103	R34467	6.61	0.43	15.42	7.00	8.00	8	419.64	Lung	Heart	Pituitary
3899	246304	Hs 77311	N74741	80.39	8.24	10.96	4.00	0.00	10	246.01	Umbilical cord	Synovial mem	Foreskin
3900	810734	Hs 82320	AA488820	91.73	15.63	5.87	2.00	0.00	11	271.39	Umbilical cord	Cervix	Foreskin
3902	724586	Hs 1706	AA281577	36.46	6.26	5.83	0.00	2.00	13	320.82	Umbilical cord	Cervix	Foreskin
3910	71622	Hs 1904	V75957	62.39	11.34	5.50	2.00	0.00	14	39.26	Peripheral nervous system	Stomach	Stomach
3911	341317	Hs 48460	V69007	18.72	3.61	5.46	1.00	0.00	1	111.42	Placenta	Stomach	Aorta
3912	813714	Hs 195176	AA453350	64.89	5.69	9.82	3.00	0.00	11	424.82	Parathyroid	Pituitary	Nose
3914	376290	Hs 166483	AA036370	10.72	0.10	107.24	9.00	6.00	13	128.62	Aorta	Gall bladder	Uterus
3916	248454	Hs 92659	N59828	151.89	20.02	7.59	2.00	0.00	21	247.7	Stomach	Germ cell	Kidney
3924	768272	Hs 160065	AA409724	53.10	7.02	7.57	4.00	0.00	13	317.36	Thymus	Cervix	Adipose
3928	321708	Hs 79353	V33012	48.79	8.00	6.10	1.00	0.00	8	31.44	Thyroid	Small intestine	Skin
3931	823876	Hs 80350	AA490595	141.89	19.22	7.36	2.00	0.00	18	40.62	Whole embryo	Lymph	Heart
3936	359892	Hs 79428	AA083521	170.86	6.59	25.92	13.00	0.00	9	320.66	Ignore	Smooth musc	Thyroid
3937	808639	Hs 2175	AA443000	5.44	0.59	9.28	1.00	0.00	4	28.12	Adrenal gland	Pancreas	Cervix
3941	240249	Hs 64797	H89864	33.85	2.04	15.59	8.00	0.00	15	203			
3943	628935	Hs 170133	AA194765	39.61	5.24	7.56	0.00	0.00	1	163.66	Bone marrow	Umbilical cord	Foreskin
3945	301081	Hs 78409	V60796	9.88	0.73	13.55	4.00	5.00	1	294.09	Ear	Adrenal gland	Whole embryo
3946	49710	Hs 150101	H29077	68.65	9.78	7.05	1.00	0.00	1	681.91	Gall bladder	Adipose	Liver
3948	836389	Hs 148493	AA598950	76.84	0.43	180.62	9.00	6.00	4	171.01	Peripheral	nerve	Thyroid
3950	836389	Hs 81728	AA457199	13.79	2.43	5.68	1.00	0.00	1	72.78	Tonsil	Ovary	Blood
3952	585009	Hs 12484	AA173746	7.94	1.09	7.28	1.00	0.00	8	423.72			
3953	8089071	Hs 83184	AA464342	27.16	1.70	15.96	3.00	6.00	9	414.81	Synovial mem	Bone	Skin
3954	842785	Hs 75140	AA488313	97.95	10.21	9.59	7.00	0.00	3	162.07	Adrenal gland	Pooled	Uterus
3955	73381	Hs 76362	T35601	64.56	9.60	6.73	1.00	0.00	3	Ear			Whole embryo
3956	774754	Hs 171271	AA442092	151.21	24.87	0.08	2.00	0.00	1				
3960	85394	Hs 173717	T72119	20.20	3.59	5.63	0.00	1.00	1				
3961	134783	Hs 102756	R31701	12.86	0.95	13.59	5.00	4.00	1				
3962	82734	Hs 154680	T73566	27.50	3.46	7.96	2.00	0.00	1				
3964	833101	Hs 74471	AA487623	409.63	5.25	78.01	17.00	3.00	1				
3966	47853	Hs 194828	H11346	5.67	1.06	5.36	1.00	0.00	1				
3968	46916	Hs 90800	H09897	10.05	0.20	49.44	15.00	1.00	1				
3969	143523	Hs 146428	R75635	21.48	2.26	9.52	0.00	1.00	9				
3973	813651	Hs 78712	AA453681	51.59	9.34	5.52	2.00	0.00	3				
3977	361204	Hs 53563	AA017526	6.46	0.19	34.35	5.00	4.00	3				

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3980	711532	Hs.48778	AA280924	8.60	0.31	28.12	9.00	6.00	21	197.96 CNS	Kidney	Brain
3984	258531	Hs.76405	H97134	97.72	3.72	5.13	1.00	1.00	1	165.59 Parathyroid	Nose	Breast
3985	229892	Hs.180928	H67349	5.13	1.00	20.23	0.00	2.00	2	704.29 Muscle	Tonsil	Lung
3986	194182	Hs.23581	H51066	90.12	12.58	7.16	0.00	1.00	1	175.86 Nose	Nose	Uterus
3987	841879	Hs.10803	AA488699	21.70	1.48	14.68	4.00	2.00	2	849.48 Cervix	Spleen	Thyroid
3988	83805	Hs.50886	T81078	8.99	1.89	5.28	2.00	0.00	2	339.21 Umbilical cord	CNS	Liver
3989	823775	Hs.17399	AA490256	16.86	0.86	19.24	9.00	6.00	1	309.17 Marrow	Eye	Bone
3992	763744	Hs.27239	AA488941	59.73	5.80	10.28	3.00	1.00	15	192.86 Bone	CNS	Breast
3994	767202	Hs.83337	AA424629	106.34	4.43	23.99	11.00	3.00	14	285.55 Blood	Lymph	Breast
3998	841059	Hs.82422	AA485942	31.39	3.47	6.03	0.00	2.00	2	367.22 Aorta	Foreskin	Corn
4001	813254	Hs.12807	AA458376	30.32	3.10	12.69	10.00	1.00	5	108.91	Foreskin	Whole embryo
4002	839594	Hs.173842	AA504655	175.87	16.01	10.99	0.00	4.00	2	650.46 Cervix	Skin	Smooth muscle
4004	511321	Hs.135560	AA128358	407.49	70.20	5.80	3.00	0.00	5	88.56 Nose	Stomach	Bone
4005	154006	Hs.195839	R54778	7.75	0.55	14.09	3.00	4.00	1	191.11 Cervix	CNS	Heart
4008	75415	Hs.43721	T57556	249.05	38.33	6.30	2.00	0.00	3	599.13 Ear	Head and neck	Head and neck
4007	840818	Hs.81008	AA486238	213.08	18.15	11.74	10.00	1.00	3	528.78 Ear	Head and neck	Head and neck
4010	815501	Hs.76084	AA456868	7.77	0.34	14.41	7.00	5.00	2	313.97 Smooth muscle	Neural	Neural
4013	121259	Hs.118571	T98612	749.26	3.26	228.39	10.00	5.00	2	259.81 Ovary	Stomach	Colon
4014	712277	Hs.88859	AA381548	10.46	0.51	20.41	4.00	5.00	3	268.88 Ear	Uterus	Colon
4016	203132	Hs.83429	H54629	11.87	1.00	11.87	0.00	2.00	3	562.55 Larynx	Smooth muscle	Esophagus
4017	245553	Hs.74628	N72918	42.35	4.28	9.88	2.00	0.00	17	401.58 Smooth muscle	Larynx	Stomach
4018	774771	Hs.118468	AA446251	107.31	7.14	15.02	8.00	0.00	7	596.55 Lymph node	Cervix	Adrenal gland
4019	325365	Hs.86489	W52273	45.73	3.57	12.80	10.00	1.00	12	375.91	Thymus	Stomach
4020	40751	Hs.173372	R56219	6.85	0.54	12.73	13.00	0.00	16	259.81 Ovary	Placenta	Breast
4021	711308	Hs.87539	AA443530	94.17	10.28	9.16	3.00	2.00	11	142.53 Adipose	Lymph	Tonsil
4022	786093	Hs.79300	AA448878	111.97	11.20	10.04	5.00	0.00	8	152.15 Ear	Gall bladder	Stomach
4024	146577	Hs.82173	R78805	23.41	1.94	12.04	5.00	0.00	1	317.73 Adipose	Pancreas	Breast
4026	897544	Hs.77688	AA469582	8.47	1.49	5.89	2.00	0.00	1	142.53 Adipose	Pancreas	Umbilical cord
4028	86672	Hs.198084	T33626	6.48	1.00	6.48	0.00	1.00	16	596.55 Lymph node	Thymus	Stomach
4029	36387	Hs.2533	R25818	48.01	9.14	5.28	0.00	1.00	1	Blood	Colon	Tonsil
4030	700899	Hs.208288	AA385073	15.34	2.84	5.41	1.00	0.00	X	142.53 Adipose	CNS	Germ cell
4034	295376	Hs.5206	W04450	13.87	2.70	3.14	1.00	0.00	2	355.71 Brain	Placenta	Germ cell
4035	135058	Hs.199836	R33011	19.68	3.68	18.04	8.00	0.00	1	180.72 Parathyroid	Whole embryo	Liver
4038	274529	Hs.10862	R85387	17.11	0.95	5.37	0.00	1.00	1	285.93 Spleen	Stomach	Whole embryo
4053	235164	Hs.5309	H79468	14.55	0.39	37.02	9.00	6.00	11	80.98 Skin	Liver	Bone
4058	137381	Hs.28391	R63134	8.50	1.28	5.07	1.00	0.00	4	Bone	Colon	Whole embryo
4064	137989	Hs.28392	R63137	5.87	1.13	5.18	1.00	0.00	18	72.43 Thyroid	Adipose	Gall bladder
4065	214856	Hs.4980	H74108	18.31	3.53	5.19	1.00	2.00	13	543.92 Placenta	Cervix	Bone
4068	136117	Hs.181554	R33273	29.29	4.41	6.84	5.00	0.00	22	608.86 Cerv cell	Parathyroid	Pool
4089	364840	Hs.5900	AA028164	67.15	10.24	6.58	1.00	0.00	4	Placenta	Testis	Brain
4090	133262	Hs.5466	R00431	27.44	5.11	5.37	0.00	1.00	7	Placenta	Testis	LID not found
4096	141209	Hs.28403	R66533	25.68	3.15	8.11	4.00	0.00	16	Placenta	LID not found	Other
4097	137083	Hs.173880	R35503	6.53	1.00	6.53	0.00	1.00	1	CNS	Placenta	Breast
4098	234039	Hs.5948	H68888	77.38	12.99	5.96	1.00	0.00	4	85.56 Aorta	Kidney	Pool
4103	233888	Hs.6850	H78537	36.62	3.34	10.97	15.00	2.00	10	276.5 Pool	Whole embryo	Testis
4109	207107	Hs.128783	H48677	16.08	3.10	6.32	0.00	1.00	14	432.99 Heart	Lung	Pool
4112	138708	Hs.159785	R63548	17.52	1.42	12.37	14.00	0.00	10	Small intestine	Cervix	Gall bladder
4120	138752	Hs.28425	R63528	16.98	1.16	14.81	14.00	0.00	22	126.46 Pool	LID not found	Other
4124	136908	Hs.24883	R39730	150.48	13.91	10.82	5.00	2.00	1	375.91	CNS	Breast
4126	40751	Hs.173372	R58219	5.43	0.10	54.29	3.00	0.00	1	85.56 Aorta	Kidney	Pool
4128	130745	Hs.28428	R83530	29.87	2.20	13.57	13.00	0.00	1	276.5 Pool	Whole embryo	Testis
4133	204638	Hs.37380	H56931	32.56	6.14	5.30	1.00	0.00	14	432.99 Heart	Lung	Pool
4136	323474	Hs.74571	W45572	20.80	0.71	37.73	7.00	0.00	10	Small intestine	Cervix	Gall bladder
4137	200780	Hs.35828	R88191	12.58	1.72	7.30	5.00	0.00	10	126.46 Pool	LID not found	Other
4139	840583	Hs.74019	AA488072	9.23	1.33	6.94	1.00	0.00	1	375.91	CNS	Breast
4140	261836	Hs.21704	H98856	12.97	1.24	10.49	4.00	0.00	1	85.56 Aorta	Kidney	Pool
4142	234468	Hs.180900	H94819	91.56	6.93	13.21	1.00	0.00	1	276.5 Pool	Whole embryo	Testis

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4143	491232	Hs.25383	AA152294	10.77	1.34	8.07	1.00	0.00	Pooled	Whole embryo	Eye
4144	782635	Hs.5556	AA447559	18.86	0.11	155.80	9.00	6.00	Bone marrow	Larvix	Esophagus
4145	109437	Hs.14694	T81338	33.97	4.41	7.71	2.00	0.00	322.94	Synovial mem	Adrenal gland
4151	586958	Hs.2942	AA125089	6.98	1.19	5.84	1.00	0.00	160.78	Cervix	Colon
4152	268354	Hs.17778	N26125	8.36	0.95	8.78	8.00	2.00	835.81	Forestin	Eye
4153	20191	Hs.35953	H94849	7.65	0.81	12.55	1.00	0.00	536.56	Pool	LID not found
4155	132104	Hs.143434	R25234	12.91	1.66	6.59	3.00	1.00	217.06	Pooled	Whole embryo
4156	488422	Hs.32317	AA044682	7.03	0.10	70.32	9.00	6.00	32.22	Smooth musc	Adrenal gland
4158	345751	Hs.56936	W72821	7.78	0.78	9.89	3.00	5.00	211.28	Smooth musc	Placenta
4160	502421	Hs.7535	AA158743	72.29	11.39	6.34	2.00	0.00	425.86	Uterus	Breast
4161	201173	Hs.177271	R84492	13.50	1.73	7.00	5.00	0.00	475.59	Uterus	Lung
4162	230274	Hs.57423	H93466	23.49	3.59	6.55	2.00	0.00	147.53	Thyroid	Aorta
4168	350338	Hs.192516	W02400	6.00	1.20	5.00	1.00	0.00	39.28	Peripheral nervous system	Ovary
4169	343661	Hs.57988	W69279	8.05	1.00	8.05	3.00	1.00	815.65	Umbilical cord	Thymus
4191	733997	Hs.79428	AA446839	18.58	0.28	84.36	9.00	6.00	Pool	LID not found	Other
4192	1048910	Hs.78285	AA621342	22.57	0.12	181.85	9.00	6.00	490.97	Pooled	Forestin
4193	201334	Hs.35981	R98591	27.18	1.88	14.47	3.00	2.00	117.11	Pool	LID not found
4204	341880	Hs.102267	W680414	123.61	2.00	61.92	23.00	5.00	78.97	Pool	LID not found
4205	204489	Hs.207231	H58574	29.59	3.80	7.78	3.00	0.00	Placenta	Germ Cell	Breast
4208	66481	Hs.12701	R16134	5.34	1.00	5.34	0.00	1.00	Smooth muscle	CNS	Muscle
4209	206882	Hs.35952	R93905	19.32	2.04	9.46	13.00	0.00	259.63	Esophagus	Germ Cell
4211	230116	Hs.105083	H80171	23.93	4.67	5.12	1.00	0.00	90.57	Colon	Whole embryo
4216	66373	Hs.12869	T66502	13.12	2.39	5.50	0.00	1.00	160.48	Liver	Tonsil
4230	24735	Hs.50924	H77652	80.97	1.00	80.97	15.00	5.00	54.61	Thymus	Blood
4234	22040	Hs.151738	T72581	7.11	0.47	14.97	4.00	1.00	535.13	Thymus	Adrenal gland
4239	506588	Hs.82037	AA045587	48.33	8.13	5.40	1.00	0.00	123.41	Small intestine	Stomach
4240	221092	Hs.78915	H91651	19.62	2.35	8.36	2.00	0.00	351.63	Umbilical cord	Larvix
4243	873683	Hs.52788	AA489729	108.64	21.28	5.03	1.00	0.00	482.85	Thyroid	CNS
4247	365930	Hs.155188	AA038948	16.65	2.80	5.59	2.00	0.00	319.18	Placenta	Whole embryo
4248	260325	Hs.78	H96241	15.65	2.80	206.10	23.00	4.00	67.12	Brain	LID not found
4250	598115	Hs.83169	AA143201	224.97	1.08	13.29	4.00	0.00	84.65	Parathyroid	Lymph
4266	212486	Hs.32845	H70017	13.26	1.00	7.32	4.00	0.00	540.39	Pooled	Pool
4270	46786	Hs.6642	H09606	90.74	12.40	7.32	4.00	0.00	388.48	Neural	Synovial mem
4272	133213	Hs.2173	R28447	7.38	1.00	7.38	0.00	0.00	675.52	Adrenal gland	Parathyroid
4278	180864	Hs.151250	R37640	10.73	0.09	115.15	8.00	6.00	417.78	Synovial mem	Skin
4280	308437	Hs.576	N85761	36.14	2.28	15.64	0.00	3.00	548.98	Germ Cell	Colon
4283	301122	Hs.81071	N79484	35.56	2.75	12.93	11.00	3.00	205.28	Ear	Eye
4284	164749	Hs.26433	R55619	38.82	4.87	8.00	2.00	0.00	617.56	CNS	Uterus
4286	758372	Hs.37682	AA481944	182.27	3.35	48.47	8.00	6.00	218.01	Nose	Gall bladder
4292	813761	Hs.76268	AA463388	26.64	5.09	5.92	2.00	0.00	156.2	Stom	Forestin
4298	240634	Hs.171778	H80219	28.32	4.92	5.75	2.00	0.00	350.67	Stom	Forestin
4308	243549	Hs.1334	N48526	41.47	4.82	8.61	8.00	0.00	54.58	Synovial mem	Pooled
4308	299154	Hs.62187	W05408	23.50	1.94	12.13	8.00	0.00	208.56	Small intestine	Adipose
4310	346562	Hs.107019	W74377	5.38	0.23	23.66	6.00	6.00	672.05	Adrenal gland	Esophagus
4311	50680	Hs.171374	H15822	26.33	4.91	5.36	1.00	0.00	240.78	Bone	Ovary
4314	768316	Hs.69433	AA489766	125.35	5.74	21.50	0.00	3.00	686.82	Bone	Umbilical cord
4315	755975	Hs.76111	AA486581	57.88	7.83	7.41	1.00	0.00	150.21	Smooth musc	Aorta
4326	825224	Hs.198109	AA504128	28.54	4.87	6.11	1.00	0.00	129.18	Uterus	Lymph
4327	785012	Hs.198862	AA462381	44.64	0.27	165.25	22.00	5.00	316.2	Small intestine	Bone
4330	784104	Hs.194824	AA448737	24.46	4.80	5.09	0.00	1.00	135.5	Head and nec	cord
4333	837870	Hs.76494	AA434342	16.52	1.68	9.84	2.00	2.00			
4334	747125	Hs.65438	AA405504	16.41	1.00	16.41	6.00	1.00			
4335	139009	Hs.118162	R62612	1248.21	4.80	259.83	19.00	2.00			
4336	358468	Hs.98334	W98014	25.41	3.89	6.53	0.00	0.00			
4338	502067	Hs.16950	AA127784	23.50	3.77	8.25	6.00	1.00			
4338	777851	Hs.78060	AA476263	35.69	5.09	7.01	2.00	0.00			
4341	789162	Hs.78998	AA450265	130.84	14.63	8.94	3.00	0.00			

Table 3A

4344	284682	Hs.110524	W01603	60.30	11.68	5.16	1.00	0.00	4	62.07	Eye	Kidney	Pool
4347	623923	Hs.75812	R02059	23.08	3.73	6.19	1.00	0.00	14	18.43	Adipose	Adipose	Adipose gland
4352	124629	Hs.178817	R02059	99.88	17.48	5.71	1.00	0.00	14	162.44	Thyroid	Uterus	Ear
4353	210717	Hs.1501	H84348	22.38	3.84	5.84	1.00	1.00	6	442.4	Thyroid	Blood	Whole embryo
4357	23073	Hs.56066	R35539	163.06	0.90	180.02	23.00	5.00	4	580.52	Thyroid	Tonsil	Eye
4368	191882	Hs.169764	H39759	34.31	1.00	34.31	20.00	4.00	2	708.21	Thymus	Ear	Whole embryo
4373	838802	Hs.76768	AA457871	106.82	14.20	7.48	1.00	2.00	10	372.28	Thymus	Stomach	Neural
4375	122159	Hs.119571	T98512	698.81	4.25	164.06	13.00	5.00	2	599.13	Ear	Stomach	Neural
4377	501994	Hs.66	AA128153	33.21	4.14	8.02	2.00	0.00	2	350.44	Adipose	Aorta	Uterus
4380	251875	Hs.42222	H98871	28.77	4.24	6.20	0.00	1.00	1	Fore skin	Fore skin	Fore skin	Lung
4382	613126	Hs.95482	AA211448	29.20	4.10	7.12	4.00	0.00	4	457.32	Peripheral ner	Pancreas	Small intestine
4387	823871	Hs.75445	AA400694	77.41	3.82	20.27	1.00	6.00	4	570.96	Stomach	Tonsil	Adipose
4390	824802	Hs.155530	AA491191	88.49	1.00	69.49	1.00	2.00	1	670.96	Stomach	Tonsil	Adipose
4391	221172	Hs.169370	H91828	22.02	3.24	6.79	3.00	0.00	1	65.95	Gall bladder	Fore skin	Parathyroid
4393	787018	Hs.64	AA463565	21.12	0.10	211.25	8.00	6.00	1	240.08	Larynx	Ear	Muscle
4396	110503	Hs.169465	T82817	47.17	3.52	13.39	17.00	2.00	11	104.33	Larynx	Ear	Muscle
4398	840889	Hs.1659	AA482251	28.16	5.45	5.16	2.00	0.00	20	824.62	Ear	Adrenal gland	Parathyroid
4403	828138	Hs.81131	AA521337	14.72	0.10	147.20	9.00	6.00	7	272.02	Thyroid	Thyroid	Aorta
4413	301974	Hs.44	AA501449	12.23	1.58	7.78	0.00	1.00	1	191.7	Whole embryo	Brain	Pool
4414	72391	Hs.198005	T51689	7.84	1.50	5.28	0.00	1.00	1	250.6	Pool	LID not found	Other
4415	841698	Hs.184161	AA487582	106.75	9.88	10.72	4.00	0.00	19	73.37	Ignore	Adipose	Uterus
4422	111549	Hs.184671	T84663	9.59	1.15	8.34	1.00	0.00	4	446.48	Placenta	Adrenal gland	Pooled
4429	141823	Hs.162578	R69307	20.35	1.84	11.05	6.00	6.00	12	575.86	CNS	Uterus	Tonsil
4431	137456	Hs.23352	R38300	28.22	2.26	12.46	18.00	3.00	2	487.91	Thymus	Pooled	Gall bladder
4432	194870	Hs.159865	R69862	5.87	1.00	5.87	0.00	1.00	7	Head and nec	Umbilical cord	Liver	LID not found
4436	288558	Hs.30877	N78353	6.97	1.08	8.35	2.00	0.00	X	324.96	Brain	Pool	LID not found
4438	295985	Hs.180018	N87039	57.21	2.23	25.61	14.00	0.00	5	652.21	Pool	LID not found	Other
4441	358458	Hs.9550	V66107	102.11	18.56	5.50	2.00	0.00	7	6172.7	Germ Cell	Blood	Eye
4442	293417	Hs.194145	N92134	130.10	25.83	5.04	1.00	0.00	3	684.2	Ear	Brass	Pool
4444	295377	Hs.31542	N68839	10.18	1.00	10.19	0.00	1.00	8	418.47	Ear	Muscle	Eye
4464	195052	Hs.34371	R91176	31.82	2.11	15.01	14.00	0.00	1	300.71	Neural	Placenta	Whole embryo
4468	470248	Hs.31841	AAQ25351	53.50	1.86	28.82	14.00	0.00	9	404.02	Pool	LID not found	Other
4469	296783	Hs.126764	W01171	41.02	6.04	6.79	2.00	0.00	17	367.76	Adipose	Adrenal gland	Cervix
4471	130572	Hs.61280	R22420	6.40	1.00	6.40	0.00	2.00	12	105.98	Thyroid	Liver	CNS
4472	195127	Hs.198857	R91220	12.96	0.10	126.80	18.00	6.00	8	565.78	Fore skin	Pool	LID not found
4480	195091	Hs.34394	R91244	22.28	2.24	9.84	6.00	0.00	4	558.69	Fore skin	Pool	LID not found
4481	306652	Hs.153612	W25202	31.28	1.48	21.10	2.00	0.00	6	501.47	Adrenal gland	Colon	Colon
4488	195117	Hs.34396	R91256	12.23	1.91	6.41	1.00	0.00	11	220.05	Pool	LID not found	Other
4492	248306	Hs.32171	N78103	18.14	1.00	19.14	9.00	6.00	5	504.31	Placenta	Heart	Whole embryo
4493	808656	Hs.82129	AA484860	7.72	1.00	7.72	0.00	2.00	11	348.77	Ear	Ear	Parathyroid
4495	144893	Hs.113716	R78550	8.59	1.87	5.15	1.00	0.00	14	207.23	Lung	LID not found	LID not found
4496	195139	Hs.34389	R91271	26.88	1.28	20.96	14.00	0.00					
4500	182181	Hs.32202	H25907	11.38	1.67	6.63	7.00	0.00					
4514	286030	Hs.10382	N73575	21.23	1.47	14.44	3.00	0.00					
4515	153523	Hs.193526	T86959	18.70	1.44	12.99	6.00	0.00					
4516	373523	Hs.11814	V44411	21.72	4.26	5.10	1.00	0.00					
4517	243405	Hs.204315	N49436	177.13	17.58	10.07	3.00	0.00					
4518	295041	Hs.94268	W02424	41.53	4.88	9.50	3.00	0.00					
4530	128457	Hs.148877	R10945	61.86	3.68	16.72	10.00	0.00					
4531	125239	Hs.5080	R08372	10.26	0.10	99.76	9.00	8.00					
4533	243887	Hs.44541	N49669	28.52	1.85	15.41	8.00	0.00					
4535	341588	Hs.79432	W55366	6.33	1.65	5.08	1.00	0.00					
4542	285514	Hs.206507	W23546	134.05	9.58	14.08	2.00	0.00					
4546	308163	Hs.84520	W24622	95.28	16.92	5.63	1.00	0.00					
4558	301678	Hs.94542	N79558	45.80	3.71	12.34	11.00	0.00					

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4561	283990	HS.182023	N95556	73.34	3.21	22.86	3.00	1.00	1	695.13 Pool	LID not found	Other
4563	810328	HS.12866	AA464143	11.93	1.00	11.93	0.00	1.00	15	143.95 Ovary	Tonsil	Pool
4565	261180	HS.44766	W00890	61.70	0.10	616.07	9.00	6.00		Germ Cell	Lymph	Pancreas
4570	325365	HS.86489	W52273	46.85	2.84	16.50	20.00	3.00	12	313.97 Smooth muscle	Pooled	-
4575	195128	HS.17940	R91171	10.42	1.00	10.42	0.00	1.00	12	205.73 Smooth muscle	Ear	-
4579	271038	HS.24950	N34362	14.81	1.00	14.81	4.00	4.00	1	592.98 Adrenal gland	Aorta	Smooth muscle
4583	785499	HS.169828	AA454215	12.94	2.37	5.46	1.00	0.00	16	408.51 Brain	Eye	Unilateral cord
4590	235008	HS.182874	H79130	22.78	2.98	7.69	3.00	0.00	7	20.09 Pooled	Brain	Uterus
4592	811607	HS.12479	AA454618	18.06	3.53	5.40	1.00	0.00	2	225.84 Stomach	Fore skin	Pooled
4593	201180	HS.150000	H74330	28.49	3.35	8.49	2.00	0.00	5	357.64	Blood	Testis
4595	809811	HS.107159	AA458487	18.45	0.08	198.78	11.00	6.00		Cervix	Uterus	Pool
4597	243878	HS.44970	N45263	63.10	5.08	12.88	22.00	1.00			Germ Cell	
4606	344141	HS.139	W69781	35.47	2.06	17.18	13.00	0.00				
4608	787590	HS.108127	AA460301	14.51	0.35	41.84	9.00	6.00	13	77.01 Synovial men	Blood	Lymph
4611	823598	HS.4295	AA467132	1.42	19.53	1.00	0.00	0.00	17	427.03 Head and nec	Thymus	Aorta
4614	834644	HS.82159	R27585	138.07	24.41	5.66	1.00	0.00	X	253.47 Unilateral cord	Prostate	Bone
4618	183174	HS.78869	H27378	82.00	6.36	12.89	5.00	0.00		Cervix	Thyroid	Lymph
4620	202535	HS.173451	HS3340	118.98	7.75	54.16	10.00	3.00	16	372.07		
4622	528681	HS.77060	AA070997	116.20	21.47	5.41	3.00	0.00	17	43.31 Head and nec	Neural	Cervix
4624	138573	HS.75975	R64190	33.02	3.77	6.76	2.00	0.00	1	665.91 Trachea		Lymph node
4626	592243	HS.2012	AA155695	7.89	1.00	7.89	0.00	4.00	11	221.51 Pancreas	Uterus	Parathyroid
4627	246549	HS.1390	N73252	11.79	1.00	11.79	0.00	2.00	1	111.21 Peripheral ner	Larynx	Head and neck
4638	812105	HS.75823	AA456708	54.66	3.11	17.55	16.00	1.00	1	544.45 Aorta	Ear	Pooled
4642	382787	HS.182231	AA065896	6.72	1.00	6.72	0.00	2.00	3	461.79 Brain	Testis	LID not found
4650	143443	HS.2001	R76436	8.47	1.00	8.47	0.00	2.00	7	840.87 Liver	Breast	Colon
4651	33849	HS.77498	R44822	68.09	9.80	5.87	1.00	0.00		Esophagus	CNS	Ear
4655	332869	HS.22559	R18849	7.71	1.36	5.87	1.00	0.00		Skin		
4658	38393	HS.4112	R25623	98.63	17.43	5.66	1.00	0.00	6	620.93 Spleen	Adrenal gland	Lymph
4663	382728	HS.75137	AA016658	21.20	2.07	13.14	4.00	0.00	7	137.7 Synovial men	Cervix	Eye
4664	203351	HS.23103	HS4367	58.07	7.71	7.53	3.00	0.00	7	672.6 Cervix	Parathyroid	Placenta
4670	812048	HS.74621	AA455969	263.24	16.19	16.26	10.00	1.00	20	12.17 Pooled	Adipose	Whole embryo
4672	340558	HS.82425	W55964	142.36	15.12	9.41	7.00	0.00		Head and nec	Bone	Adrenal gland
4675	357220	HS.151123	W93815	15.97	2.03	7.80	2.00	1.00		CNS	Heart	
4679	43977	HS.75909	H05563	17.76	3.45	5.15	1.00	0.00	16	474.73 Placenta	Ear	Aorta
4686	388650	HS.74137	W04600	70.00	3.06	22.88	5.00	0.00	14	200 Head and nec	Parathyroid	Esophagus
4698	26879	HS.552	R36874	10.58	0.90	11.73	3.00	3.00	5	22.84 Head and nec	Cervix	Pooled
4702	40843	HS.78144	R56211	9.78	1.00	9.78	0.00	4.00	2	378.83 Bone	Whole embryo	Pancreas
4706	897587	HS.2785	AA489411	65.12	3.31	19.68	7.00	5.00	5	740.03 Bone	Esophagus	Stomach
4709	813711	HS.195518	AA453859	23.15	2.84	8.32	10.00	1.00	4	489.95 Small intestine	Thyroid	Small intestine
4712	83120	HS.154583	T88202	34.79	6.82	5.26	1.00	0.00	X	137.71 Thyroid	Skin	Aorta
4714	823285	HS.153488	AA504461	35.76	0.82	57.74	16.00	0.00	16	77.09 Mouth	Nose	Adrenal gland
4715	687387	HS.76781	AA235332	54.17	8.72	6.21	2.00	0.00	1	266.38 Small intestine	Eye	Neural
4716	838568	HS.74848	AA466931	185.57	36.77	9.05	1.00	0.00		Muscle	Heart	Fore skin
4717	307231	HS.4	N93428	20.46	0.82	22.31	16.00	6.00	4	480.77 Smooth muscle	Liver	Ear
4718	811869	HS.168102	AA454552	16.76	3.12	5.05	0.00	1.00		Ovary	Lung	Aorta
4721	283023	HS.78913	N51278	5.78	1.00	5.78	0.00	1.00	3	135.47 Brain	CNS	Breast
4722	842836	HS.183583	AA488275	25.47	4.28	5.94	0.00	1.00	6	16.54 Larynx	Thyroid	Pancreas
4725	247117	HS.144367	N57872	232.03	3.53	63.25	11.00	3.00	2	742.57 Liver	Pool	-
4728	825442	HS.82911	AA504327	232.78	38.43	6.06	1.00	0.00	1	82.6 Small intestine	Pooled	Adipose
4734	380851	HS.181148	AA056148	17.78	0.54	32.83	8.00	6.00	11	225.28 Head and nec	Thyroid	Blood
4735	887810	HS.136348	AA588653	328.89	1.88	193.28	20.00	5.00	13	120.56 Smooth muscle	Ear	Bone
4738	789049	HS.184760	AA452909	42.95	5.94	7.23	5.00	0.00	2	117.42 Thymus	Stomach	Fore skin
4739	760289	HS.4809	AA425847	170.78	8.08	18.86	21.00	2.00	11	47.28	Adipose	Brain
4740	789049	HS.184760	AA452909	50.16	9.02	5.56	1.00	0.00	2	117.42 Thymus	Stomach	Fore skin
4742	798268	HS.76780	AA460827	5.71	0.13	43.72	4.00	2.00	12	240.98 Bone	Muscle	Pooled
4745	727526	HS.75573	AA402431	17.20	3.41	5.05	1.00	0.00	4	480.05 Tonsil	Pool	Spleen

Table 3A

4746	897781	Hs.74271	AA598517	525.24	34.66	15.15	3.00	1.00	12	228.03	Pancreas	Colon	Head and neck
4747	814378	Hs.31439	AA430039	48.27	4.03	11.49	0.00	2.00	19	223.78	Pancreas	Nose	Parathyroid
4748	505059	Hs.37012	AA159818	86.50	2.87	30.15	23.00	6.00	1	694.88	Uterus	CNS	Germ Cell
4749	124127	Hs.83818	RO1732	21.80	2.55	8.55	1.00	1.00	1	54.46	Parathyroid	Skin	Lymph
4751	724378	Hs.177781	AA250771	203.37	39.43	5.16	0.00	0.00	22	154.71	Ovary	LID not found	Other
4757	128243	Hs.84382	R12473	10.80	1.35	8.07	2.00	0.00	10	372.68	Pooled	CNS	Germ Cell
4760	787938	Hs.5482	AA452278	12.55	1.40	6.98	9.00	0.00	17	318.26	Smooth muscle	Pooled	Stomach
4781	109708	Hs.172405	TA1764	10.20	0.58	17.88	2.00	0.00	17	318.26	Skin	Thyroid	Tonsil
4782	810131	Hs.05119	AA464250	40.21	0.89	58.08	9.00	6.00	1	682.9	Pancreas	Omentum	Nose
4789	242202	Hs.1355	H84487	33.13	2.22	14.91	11.00	1.00	1	45.84	Pancreas	Pool	Tonsil
4774	897856	Hs.30743	AA598517	12.66	2.35	5.40	1.00	0.00	22	22.83	Head and neck	Blood	Adrenal gland
4777	754117	Hs.78572	N20475	44.89	3.43	13.08	8.00	1.00	11	304.87	Heart	Whole embryo	Esophagus
4778	772878	Hs.89538	AA428454	15.82	1.27	12.30	4.00	3.00	17	304.87	Heart	Whole embryo	Spleen
4779	783938	Hs.130233	AA458841	82.00	2.21	28.10	16.00	6.00	19	316.22	Liver	Pancreas	Germ Cell
4780	130518	Hs.47913	N85524	6.25	1.11	5.64	1.00	0.00	13	127.97	Skin	Pancreas	Pool
4782	712604	Hs.161368	AA281932	188.99	9.30	20.32	18.00	2.00	11	176.54	Ear	Pancreas	CNS
4785	245388	Hs.76359	N77183	11.82	2.12	5.58	1.00	0.00	11	545.17	Pool	LID not found	Other
4792	841282	Hs.105700	AA468638	17.83	2.44	7.31	1.00	0.00	2	575.39	Brain	Spleen	Muscle
4794	488413	Hs.149436	AA046680	86.63	8.85	7.52	7.00	0.00	10	304.52	Ear	Tonsil	UD not found
4798	781382	Hs.194860	AA464000	11.91	0.55	21.66	9.00	8.00	2	98.8	Adrenal gland	Pancreas	Bone
4803	214165	Hs.18046	H17772	42.80	5.18	8.26	4.00	0.00	14	67.03	Kidney	Germ Cell	Pool
4811	121459	Hs.164138	H10721	25.19	1.00	25.19	1.00	8.00	2	317.31	Spleen	Thymus	Neural
4816	121459	Hs.28435	R63782	19.71	2.24	8.43	1.00	0.00	2	642.27	Placenta	Forebrain	Testis
4818	292528	Hs.5690	N80371	54.89	2.57	21.38	0.00	1.00	6	115.59	Placenta	Testis	UD not found
4821	122982	Hs.16878	R00332	6.77	1.00	6.77	0.00	0.00	12	217.08	CNS	Forebrain	Eye
4822	793078	Hs.182167	N89719	53.19	2.85	18.01	14.00	2.00	12	627.7	Brain	Placenta	LID not found
4824	141298	Hs.28441	R54408	45.31	1.89	23.66	14.00	0.00	1	15.9	Aorta	Stomach	Umbilical cord
4833	123087	Hs.118910	R02529	29.70	0.12	23.70	23.00	8.00	14	410.24	Ear	Aorta	Breast
4840	141366	Hs.177147	R64449	18.79	0.33	51.46	13.00	0.00	11	500.33	Lymph	Tonsil	LID not found
4854	121521	Hs.210705	T97784	63.38	8.58	6.61	3.00	0.00	7	18.16	Stomach	Pooled	Germ Cell
4859	295584	Hs.204889	Y02403	193.89	30.53	8.35	2.00	0.00	15	166.71	Placenta	Testis	Pool
4862	61840	Hs.101281	H20568	5.01	0.54	9.24	5.00	2.00	8	326.53	Eye	Lung	Parathyroid
4864	139650	Hs.28456	R63982	8.57	1.66	5.15	1.00	0.00	6	520.36	Eye	Synovial mem	Heart
4865	122063	Hs.194693	T98394	20.02	3.75	5.33	1.00	0.00	9	22.85	Placenta	Pool	LID not found
4872	139689	Hs.28462	R64008	15.76	2.08	7.84	3.00	0.00	3	587.76	Pool	LID not found	Other
4880	139708	Hs.28464	R64014	20.90	1.31	15.98	3.00	0.00	7	517.22	Adrenal gland	Ovary	Stomach
4882	66474	Hs.201549	R16009	9.06	1.34	6.76	2.00	1.00	20	200.06	Pool	LID not found	Other
4884	136532	Hs.24875	R34857	23.51	4.41	5.33	1.00	0.00	2	627.18	Pool	Bone	Tonsil
4885	248258	Hs.94761	N78076	5.40	0.84	8.45	1.00	0.00	5	431.66	CNS	LID not found	Other
4886	139957	Hs.28472	R64048	187.84	3.57	47.09	23.00	2.00	10	383.52	Esophagus	Peripheral ner	Bone marrow
4899	133972	Hs.78305	R28020	59.26	11.18	5.31	1.00	0.00	20	36.48	Blood	Kidney	Testis
4900	417428	Hs.7857	N86572	35.45	3.71	9.66	2.00	0.00	5	510.59	Uterus		
4905	293932	Hs.176033	N95842	24.01	2.43	8.48	6.00	0.00					
4907	144855	Hs.106148	R78553	12.18	1.03	11.77	4.00	0.00					
4908	207421	Hs.176628	H38856	26.50	3.86	6.89	2.00	0.00					
4911	198640	Hs.159874	R33009	47.50	5.58	8.51	2.00	0.00					
4912	87031	Hs.181390	T89738	6.22	1.15	5.40	1.00	0.00					
4916	810928	Hs.153357	AA459305	58.18	7.00	8.31	7.00	0.00					
4918	275950	Hs.58978	R93394	9.51	1.65	5.77	1.00	0.00					
4923	135247	Hs.177574	R31821	37.87	3.90	9.73	3.00	0.00					
4928	240400	Hs.167844	H90746	70.90	5.52	12.84	4.00	1.00					
4928	286838	Hs.74187	N82855	7.05	1.00	7.05	0.00	2.00					
4932	281255	Hs.78575	N72215	39.49	1.70	23.27	13.00	1.00					
4936	259482	Hs.3568	N23545	82.07	11.81	7.07	2.00	0.00					
4942	135219	Hs.168880	R32851	10.45	0.54	19.40	2.00	0.00					
4953	200847	Hs.134428	R89857	37.28	3.54	10.52	3.00	0.00					

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Table 3A

4955	345816	Hs.82226	W72431	18.68	2.35	7.17	2.00	1.00	7	84.72	Lymph	Bone	CNS
4956	133182	Hs.173159	H47327	41.95	3.33	11.49	5.00	0.00	8	143.53	Head and nec	Pool	Parathyroid
4961	200937	Hs.36049	R95004	22.51	1.96	11.89	11.00	0.00	10	66.74	Pool	LID not found	Other
4967	233927	Hs.170775	H85984	128.32	13.73	9.34	3.00	1.00	11	92.14	Pool	LID not found	Other
4969	247482	Hs.124044	N54161	13.48	0.65	20.69	12.00	0.00	10	39.19	Small intestine	Head and neck	Umbilical cord
4975	240961	Hs.74316	H90989	34.10	3.99	8.54	1.00	2.00	8	281.27	Cervix	Ear	Umbilical cord
4978	765877	Hs.3938	AA460152	78.78	6.24	12.78	8.00	1.00	5	194			
4985	703551	Hs.191576	H96033	69.70	1.35	44.82	9.00	8.00	2	148.88	Cervix	Foreskin	Aorta
4986	255351	Hs.177584	R40897	11.87	0.89	19.89	3.00	0.00	5	875.53	Pool	Heart	Ovary
4999	264689	Hs.177069	AA035796	12.92	1.00	12.92	2.00	3.00	7	666.82	Bone marrow	Ignore	Pool
5004	471266	Hs.153910	AA033564	44.81	6.21	7.19	3.00	0.00	2	87.74	Bone	Umbilical cord	Aorta
5008	139009	Hs.118162	R62612	1212.46	6.08	199.54	18.00	4.00	8	248.63	Peritoneal	near kidney	Breast
5014	547247	Hs.197921	AA085318	143.92	3.75	38.33	16.00	4.00	12	671.23	Breast	Adipose	Stomach
5015	150038	Hs.171059	H24686	7.91	1.00	7.91	2.00	2.00	1	363.82	Aorta	Tonsil	Parathyroid
5016	611162	Hs.230	AA486471	30.70	2.62	12.19	0.00	5.00	12	35.86	Eye	Breast	Muscle
5019	24032	Hs.155568	R37937	9.68	1.33	7.26	2.00	0.00	18	103.12	Gall bladder		Pool
5020	341246	Hs.74362	V658658	20.53	1.00	20.53	5.00	3.00	6	552.4	Testis	Ear	Whole embryo
5030	207920	Hs.191710	H60423	26.94	1.00	26.94	8.00	6.00	1	68.66	Larynx	Esophagus	Thymus
5036	254321	Hs.15164	N22178	12.42	1.00	12.42	3.00	3.00	14	681.91	Head and nec	Skin	Tonsil
5038	729942	Hs.2621	AA399874	52.89	6.68	8.05	7.00	0.00	14	14.51	CNS	Prostate	Eye
5042	340734	Hs.81328	V55972	86.04	13.19	6.32	0.00	3.00	5	504.31	Placenta	Heart	Whole embryo
5043	30170	Hs.74552	R14760	46.00	5.76	8.16	6.00	0.00	20	254.9	Larynx	Head and nec	Cobin
5047	356665	Hs.196812	V84445	8.54	0.91	9.43	4.00	4.00	7	511.48	Thymus	Pool	Larynx
5048	121722	Hs.79432	T98152	13.81	2.20	6.28	4.00	0.00	15	186.43	Bone	Pool	Adrenal gland
5051	765921	Hs.93002	AA430504	7.99	0.11	70.18	9.00	5.00	1	54.79	Smooth musc	Garn Cell	Kidney
5054	292213	Hs.75307	AA396285	41.63	5.70	7.33	4.00	1.00	5	585.08	Skin	Thymus	Nose
5056	787851	Hs.7503	AA476240	109.32	2.74	7.38	3.00	0.00	1	747.59	Adipose	Pancreas	Umbilical cord
5058	767798	Hs.183373	AA418755	72.94	11.70	6.24	2.00	0.00	16	361.02	Umbilical cord	Ear	Pool
5060	809992	Hs.74619	AA455193	381.62	45.98	8.30	7.00	0.00	12	192.66	Pool	Skin	Thyroid
5064	68728	Hs.26	T64893	12.18	2.27	5.37	1.00	0.00	12	103.12			
5067	28099	Hs.7137	R40324	54.74	6.95	7.87	3.00	0.00	12	352.89	Bone	Stomach	Ear
5071	567265	Hs.3248	AA130736	36.01	4.30	6.37	1.00	0.00	2	128.28	Tonsil	Colon	Foreskin
5074	813823	Hs.72014	AA463712	126.08	2.46	61.28	13.00	5.00	22	133.9	Epididymis	Ignore	Thyroid
5084	210317	Hs.115279	H65526	8.09	1.56	5.20	1.00	0.00	17	54.82	Lymph	Pancreas	Placenta
5091	711918	Hs.79033	AA362134	34.15	2.25	15.17	14.00	0.00	1	597.06	Smooth musc	Synovial mem	Pool
5093	67634	Hs.187887	T48339	33.32	1.00	33.32	6.00	0.00	14	151.92	Pool	Spleen	Heart
5095	204614	Hs.199554	H59918	167.73	2.70	62.05	9.00	0.00	6	459.32	Tonsil	Liver	Pool
5096	122077	Hs.83832	T98332	65.31	11.33	5.78	1.00	0.00	22	93.94	Esophagus	Head and nec	Synovial membrane
5097	359781	Hs.47431	AA011320	6.93	1.00	6.93	0.00	2.00	11	58.6	Lymph node	Gall bladder	Head and neck
5098	826568	Hs.10037	AA521198	17.65	3.45	5.12	1.00	0.00	18	427.31		Placenta	Foreskin
5101	85979	Hs.75576	T73187	37.22	1.67	22.32	15.00	2.00	X	231.68	Skin	Skin	Lymph
5102	826204	Hs.185760	AA521453	44.44	3.89	11.43	4.00	0.00	21	157.88	Lymph	Colon	Whole embryo
5104	205745	Hs.10729	H58119	107.82	14.04	7.68	5.00	0.00	X	85.4	Uterus	Parathyroid	Cervix
5107	807871	Hs.3059	AA508868	213.06	20.79	10.26	8.00	0.00	12	352.89	Nose	Adipose	Prostate
5109	70692	Hs.75716	T49159	196.70	9.80	19.06	10.00	0.00	9	392.05	Tonsil	Adrenal gland	Brain
5115	796996	Hs.3631	AA463498	63.96	9.96	6.42	1.00	0.00	6	366.37		Breast	Parathyroid
5117	698123	Hs.82285	AA559487	32.64	8.26	6.37	3.00	0.00	6	485.48	Smooth musc	Aorta	Heart
5120	292882	Hs.204359	N80952	32.07	4.75	6.75	2.00	0.00	6				
5125	503097	Hs.194815	AA151466	56.37	11.48	5.08	1.00	0.00	12				
5133	77915	Hs.78422	T81323	18.29	2.55	7.18	5.00	0.00	9				
5134	610703	Hs.177516	AA457697	183.87	27.38	6.72	1.00	0.00	6				
5135	789147	Hs.198437	AA450189	113.01	3.83	29.50	8.00	3.00	9				
5136	824393	Hs.292815	AA489714	8.29	0.55	11.44	6.00	4.00	6				
5140	141827	Hs.28728	R65202	7.93	0.13	61.47	7.00	5.00	6				
5141	773771	Hs.65050	AA447940	6.24	1.00	0.24	0.00	2.00	6				

Table 3A

5149	897673	Hs.75988	AAS98769	94.81	14.24	6.66	2.00	0.00	10	183.31	Bone marrow	Larynx	Nose
5150	786084	Hs.77254	AA448687	81.25	12.22	6.85	1.00	0.00	9	385.82	Nose	Parathyroid	Cervix
5151	774409	Hs.76753	AA446108	189.79	3.91	48.53	4.00	3.00	3	162.79	Marrow	Adipose	Synovial membrane
5154	64231	Hs.64753	R42815	95.29	8.62	9.91	8.00	0.00	1	171.89	Smooth muscle	Cervix	Synovial membrane
5157	643174	Hs.1869	AA486504	100.11	18.62	6.41	6.00	0.00	1	257.43	Nose	Parathyroid	Muscle
5159	71672	Hs.189919	T50002	85.86	11.14	11.14	2.00	0.00	15	84.58	Bone	Adrenal gland	Muscle
5163	753381	Hs.82082	AA406332	116.00	5.70	20.36	15.00	0.00	14	32.59	Pancreas	Aorta	Bone
5165	950682	Hs.98910	AA808558	207.14	21.54	9.62	3.00	1.00	10	524.49	Aorta	Ear	Breast
5167	840844	Hs.738	AA486628	105.72	20.09	9.74	5.00	3.00	5	68.56	Bone marrow	Head and neck	Placenta
5172	137581	Hs.105509	R39578	26.89	3.94	7.26	0.00	1.00	19	458.65	Epididymis	Forearm	Neural
5179	897625	Hs.78111	AA486760	167.47	18.46	8.60	1.00	0.00	3	176.77	Umbilical cord	Smooth muscle	Adipose
5181	788139	Hs.168	AA453293	9.40	1.77	5.31	0.00	1.00	1	441.32	Breast	LID not found	Other
5188	188390	Hs.32206	H43957	5.17	1.00	5.17	6.00	1.00	10	395.51	Placenta	Pooled	Heart
5192	195995	Hs.34428	R52669	40.90	3.68	11.11	3.00	0.00	3	540.74	Breast	LID not found	Other
5193	138661	Hs.21201	R62760	23.90	2.78	8.59	0.00	1.00	8	607.47	Pool	Umbilical cord	Kidney
5196	162365	Hs.96800	H27590	17.53	1.00	17.53	2.00	2.00	6	216.99	Pool	LID not found	Other
5198	113206	Hs.15395	T85996	11.87	2.27	5.22	1.00	0.00	7	95.35	Colon	Whole embryo	Ovary
5200	198327	Hs.176804	R65916	101.49	7.73	13.14	3.00	0.00	1	275.71	Thyroid	Skin	Adrenal gland
5206	210622	Hs.34456	H64244	9.85	1.47	6.66	4.00	0.00	10	417.77	Pool	LID not found	Other
5220	209187	Hs.32391	H63668	28.20	2.59	10.90	14.00	0.00	11	128.07	Pool	LID not found	Other
5232	203772	Hs.34488	H56088	53.03	0.82	85.16	8.00	6.00	3	726.84	Smooth muscle	Placenta	Heart
5239	131050	Hs.20763	R23302	14.51	2.83	5.13	1.00	0.00	3	342.2	Brain	Ovary	Lung
5246	111391	Hs.15666	T65191	5.15	0.36	14.20	4.00	6.00	2	299.94	Pooled	Testis	CNS
5249	138775	Hs.17776	R63543	206.34	52.01	5.31	1.00	0.00	10	55.42	CNS	Lymph	Testis
5252	191508	Hs.204138	H37846	28.55	1.58	18.25	5.00	5.00	13	626.75	Ear	Small intestine	Eye
5253	201757	Hs.173739	R99335	70.72	2.58	27.38	20.00	2.00	11	124.08	Pool	LID not found	Other
5260	191497	Hs.32683	H37799	9.57	1.44	6.63	2.00	0.00	17	45.99	Brain	Placenta	Testis
5267	129567	Hs.153334	R14894	30.46	4.40	6.83	2.00	0.00	3	726.84	Smooth muscle	Placenta	Heart
5284	191569	Hs.32694	H37886	140.00	2.09	67.12	11.00	5.00	10	342.2	Brain	Ovary	Lung
5272	193820	Hs.34556	R92285	46.14	1.12	41.36	14.00	0.00	2	299.94	Pooled	Testis	CNS
5274	109269	Hs.14841	T81034	6.41	0.82	10.36	8.00	0.00	7	640.87	Placenta	Heart	Kidney
5275	128922	Hs.98269	R19183	85.35	5.47	15.60	5.00	0.00	11	55.53	Smooth muscle	CNS	Stomach
5277	366389	Hs.204406	AA025807	228.73	24.59	9.30	3.00	1.00	9	277.28	Adipose	Gall bladder	Kidney
5280	185821	Hs.34560	R92292	54.59	4.63	11.78	4.00	0.00	19	18.31	Esophagus	Ovary	Uterus
5283	135800	Hs.118087	R33103	51.13	5.07	10.09	8.00	0.00	2	223.55	Cervix	LID not found	Other
5284	789151	Hs.7301	AA453456	5.90	1.00	5.90	1.00	0.00	7	413.5	Pool	LID not found	Other
5290	469952	Hs.77356	AA025889	134.24	10.17	13.20	2.00	0.00	4	403.14	Pool	Whole embryo	LID not found
5296	811010	Hs.107169	AA485385	34.51	0.23	117.99	9.00	6.00	11	152.51	Stomach	Breast	Heart
5300	782306	Hs.7358	AA432253	5.05	1.00	5.05	0.00	1.00	7	426.78	Bone marrow	Head and neck	Ovary
5301	293868	Hs.159492	N65003	26.79	5.22	5.14	1.00	0.00	13	155.36	Whole embryo	Spleen	Kidney
5305	233446	Hs.39800	H77714	26.02	5.02	5.18	1.00	0.00	10	475.18	Eye	Placenta	Kidney
5307	320392	Hs.184340	W16632	16.94	1.03	16.49	3.00	0.00	7	413.5	Pool	LID not found	Other
5310	267011	Hs.94598	N26802	12.75	2.54	5.02	1.00	0.00	4	403.14	Pool	Whole embryo	LID not found
5311	811059	Hs.184446	AA485448	46.70	6.91	6.62	2.00	0.00	11	152.51	Stomach	Breast	Heart
5316	795877	Hs.7472	AA459635	6.61	0.73	9.07	6.00	2.00	7	426.78	Bone marrow	Head and neck	Ovary
5324	811562	Hs.182793	AA454597	53.78	10.54	5.10	1.00	0.00	13	155.36	Whole embryo	Spleen	Kidney
5326	131016	Hs.93368	R23287	95.16	3.38	25.22	15.00	0.00	10	475.18	Eye	Placenta	Kidney
5331	483003	Hs.153684	AA085749	35.25	4.55	7.74	7.00	0.00	7	413.5	Pool	LID not found	Other
5332	811035	Hs.7724	AA485433	24.08	4.69	5.13	1.00	0.00	4	403.14	Pool	Whole embryo	LID not found
5334	563701	Hs.95685	AA121778	169.27	0.36	469.65	14.00	0.00	11	152.51	Stomach	Breast	Heart
5339	110872	Hs.0353	T60436	73.72	14.73	5.00	0.00	1.00	7	413.5	Pool	LID not found	Other
5341	243648	Hs.166568	N49908	47.92	9.01	5.32	1.00	0.00	4	403.14	Pool	Whole embryo	LID not found
5345	294150	Hs.19938	N98603	47.71	8.41	5.68	1.00	0.00	11	152.51	Stomach	Breast	Heart
5355	423222	Hs.29216	AA4004210	41.96	0.69	6.60	2.00	0.00	7	413.5	Pool	LID not found	Other
5364	795266	Hs.17760	AA453394	26.53	2.21	12.15	6.00	5.00	13	155.36	Whole embryo	Spleen	Kidney
5368	125665	Hs.172620	R07694	31.68	3.84	8.26	2.00	1.00	10	475.18	Eye	Placenta	Kidney
5370	143115	Hs.113663	R73647	7.82	1.53	5.12	0.00	1.00	10	475.18	Eye	Placenta	Kidney

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Table 3A

5373	195487	Hs.175979	R02163	26.43	3.55	7.45	2.00	0.00	13	84.78	CNS	Pool	LID not found
5374	144029	Hs.142295	R77079	5.62	0.85	6.62	1.00	0.00				Breast	Kidney
5379	202571	Hs.61182	H33274	18.52	0.51	32.45	2.00	5.00	12	426.67	Omentum	Colon	Spleen
5386	128875	Hs.169855	R10604	34.33	5.79	5.92	1.00	0.00	4	443.86	Thymus	Ear	Nose
5387	810019	Hs.79825	AA454880	20.20	1.67	12.07	1.00	4.00	2	318.41			
5390	86392	Hs.75576	T67549	5.86	1.00	5.86	0.00	1.00					
5394	358335	Hs.169527	AA011215	125.93	4.03	31.26	2.00	5.00	1	557.85	Small intestine	Bone marrow	
5396	46897	Hs.30854	H09914	14.47	1.00	14.47	7.00	4.00	1	557.85	Smooth muscle	CNS	Pancreas
5398	810017	Hs.179657	AA45222	90.15	5.00	18.05	17.00	2.00	19	244.11	Skin	Ovary	
5402	320763	Hs.44450	W22135	62.87	8.55	7.36	2.00	0.00	19		Tonsil	Ear	
5403	47847	Hs.74568	H16456	19.41	3.57	5.43	1.00	0.00	7	10.27	Eye	Brain	Heart
5406	813941	Hs.173738	AA453726	41.53	1.00	41.53	4.00	1.00					
5407	597010	Hs.173288	AA133684	5.98	0.55	10.87	7.00	6.00	11	50.3	Smooth muscle	Synovial mem	Ear
5410	205303	Hs.198953	H68059	13.20	8.41	2.00	0.00	0.00	7	475.11	Larynx	Skin	Gall bladder
5414	243307	Hs.82085	N75719	17.51	0.12	140.33	17.00	4.00	X	293.18	Umbilical cord	Aorta	Umbilical cord
5426	812227	Hs.170222	AA453369	53.62	8.66	5.44	1.00	0.00	12	344.5	Thyroid	Stomach	Placenta
5427	728779	Hs.21223	AA395519	21.66	1.92	11.27	7.00	4.00	19	68.79	Stomach	Adrenal gland	Uterus
5430	809981	Hs.2706	AA451917	32.19	0.63	51.13	8.00	5.00	19	-8.56	Testis	Germ cell	Breast
5432	125906	Hs.78162	R14855	34.98	5.88	5.94	1.00	0.00	14	123.72		Cervix	CNS
5434	115143	Hs.185923	T88708	54.13	8.74	6.19	1.00	0.00	17	322.26			
5435	110512	Hs.150560	AA464731	527.68	83.14	6.35	1.00	0.00	7	161.76			
5442	190732	Hs.33084	H38650	50.75	7.62	6.66	1.00	0.00	1	31.26	Testis	Muscle	Tonsil
5443	31842	Hs.154073	R41839	6.87	1.00	6.87	1.00	3.00	17	345.1	Adipose	Skin	Umbilical cord
5446	51916	Hs.32539	H22553	53.17	1.00	5.17	0.00	1.00	20	57.43	Thyroid	Forebrain	Blood
5448	23185	Hs.204133	T77595	438.17	23.43	19.62	26.00	3.00	9	356.98	Bone	Gall bladder	Whole embryo
5451	823940	Hs.178137	AA480213	35.18	6.38	5.53	1.00	0.00	17	339.79	Small intestine	Gall bladder	
5452	137254	Hs.197845	R37519	12.18	1.76	6.80	1.00	0.00	2	635.81	Forebrain	Eye	Stomach
5455	245198	Hs.23106	N76581	5.68	0.24	24.08	9.00	6.00	17	309.48	Skin	Adipose	Stomach
5458	150623	Hs.120980	H02158	16.68	0.10	166.76	8.00	6.00	11	237.93	Trachea	Parathyroid	Thyroid
5460	27787	Hs.172651	R04000	12.29	1.00	12.29	0.00	5.00	3	-7.15	Adipose	CNS	Brain
5477	309993	Hs.110021	V24076	7.10	0.99	7.16	3.00	0.00	17	20.4	Esophagus	Tonsil	Brain
5478	484535	Hs.199241	AA036374	9.97	0.81	18.43	6.00	6.00	17	307.9	Ignore	Nose	Aorta
5480	788185	Hs.51233	AA463410	9.66	0.16	61.06	12.00	0.00	8	100.33	Thyroid	Umbilical cord	Spleen
5481	241348	Hs.136604	H81256	22.31	2.17	10.28	6.00	0.00			Pancreas	Ovary	Uterus
5482	767784	Hs.2780	AA418570	27.00	4.85	5.52	0.00	1.00				Blood	Adrenal gland
5484	42680	Hs.25203	R59697	17.85	1.73	10.19	4.00	0.00	13	76.39	CNS	Brain	Placenta
5485	51448	Hs.460	H21041	10.99	1.57	6.99	0.00	1.00	1	697.15	Smooth muscle	CNS	Parathyroid
5487	71101	Hs.02353	T47442	57.19	1.74	32.79	23.00	3.00	20	197.2	Umbilical cord	Esophagus	Adipose
5488	502369	Hs.169468	AA156340	34.17	4.38	7.85	1.00	0.00	19	187.21	Smooth muscle	Lymph node	Pooled
5492	725454	Hs.03758	AA397613	86.67	10.97	7.80	2.00	0.00	9	287.97	Muscle	Blood	Eye
5493	26817	Hs.10247	R13558	55.08	1.38	39.95	6.00	0.00	3	375.07	Epididymis	Esophagus	Cervix
5494	898062	Hs.82008	AA598776	37.84	3.41	11.12	3.00	0.00	9	280.44	Larynx	Lymph	Colon
5496	745347	Hs.76507	AA825668	5.76	0.37	15.39	1.00	1.00	16	164.45	Bone marrow	Ear	
5498	714453	Hs.75845	AA292025	92.21	6.11	15.09	9.00	2.00	16	216.22	Skin	Breast	Ovary
5499	48054	Hs.189668	H09533	25.69	0.85	30.47	3.00	0.00	16	95.45	Brain	Testis	LID not found
5500	843049	Hs.154443	AA455983	6.11	1.00	6.11	3.00	0.00			Larynx	Cervix	Blood
5501	626357	Hs.1216	AA196000	42.32	1.97	21.52	12.00	0.00	11	249.74	Muscle	Whole embryo	Testis
5502	759673	Hs.155545	AA423944	55.48	3.14	17.65	19.00	3.00				Heart	Liver
5503	429182	Hs.5085	AA004758	92.18	15.60	5.91	2.00	0.00	20	302.68	Blood	Thyroid	CNS
5505	549728	Hs.76288	AA102454	94.93	9.28	10.25	3.00	0.00	1	712.24	Nose	Pancreas	CNS
5508	320903	Hs.172689	W44701	548.80	67.49	8.10	6.00	0.00			Adrenal gland	Whole embryo	Blood
5507	72778	Hs.8216	T50828	308.30	25.07	12.22	14.00	1.00	10	508.5	Adipose	Spleen	Adrenal gland
5509	356511	Hs.1288	AA028509	37.73	7.25	5.20	1.00	0.00	1	727.92	Omentum	Muscle	Umbilical cord vein
5512	48265	Hs.74427	H12189	16.64	1.00	18.64	1.00	3.00	11	153.23	Blood	Germ cell	Breast
5515	897608	Hs.197540	AA598526	311.79	18.18	15.25	15.00	1.00	14	143.61	Peripheral nervous system	Muscle	Stomach
5516	795527	Hs.76958	AA461506	5.22	0.28	17.78	6.00	5.00			Blood	Brain	Muscle
5517	262832	Hs.75900	H99699	18.88	2.33	8.10	2.00	0.00	22	126.78	Ignore	Larynx	Synovial membrane

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5519	949932	Hs.74497	AA598175	480.34	70.05	6.85	3.00	0.00	14	151.5	Smooth musc	Esophagus	Lymph node
5521	645180	Hs.182183	AA076083	67.88	1.00	67.88	9.00	6.00	7	612.61	Spleen	Aorta	Bone
5522	480019	Hs.12503	AA033285	5.85	1.00	5.85	0.00	1.00	10	45.1	Uterus	Liver	Brain
5525	127821	Hs.1211	RA0818	10.87	0.13	82.36	1.00	4.00	11	67.54	Smooth musc	Bone	Kidney
5528	589751	Hs.90753	AA148230	26.54	3.31	8.01	1.00	1.00	11	46.69	Eye	Brain	Liver
5533	487980	Hs.78954	H14841	105.24	16.66	6.20	2.00	0.00	17	350.76	Smooth musc	Spleen	CNS
5542	416859	Hs.23442	H087611	54.81	7.15	7.88	2.00	0.00	16	510.85	Smooth musc	Esophagus	Placenta
5545	251685	Hs.76029	H06738	185.26	1.87	10.87	20.00	8.00	18	370.95	Smooth musc	Stomach	Pooled
5546	740478	Hs.80545	AA478043	15.32	0.74	20.63	8.00	8.00	5	131.34	Uterus	Whole embryo/pooled	Stomach
5547	798904	Hs.75925	AA463287	19.32	3.32	5.81	1.00	0.00	11	347.85	Stomach	Stomach	Stomach
5556	713145	Hs.169510	AA282806	136.36	1.00	136.36	20.00	4.00	11	195.03	Head end nsc	Thymus	Stomach
5558	823951	Hs.118397	AA490684	60.15	3.36	23.73	3.00	2.00	13	273.41	Synovial mem	Adrenal gland	Pooled
5561	46162	Hs.168322	H06814	28.72	2.81	10.22	2.00	0.00	13	373.71	Eye	Placenta	LID not found
5566	138139	Hs.172207	R53889	6.89	0.83	8.35	5.00	6.00	20	335.16	Cervix	Stomach	Adrenal gland
5567	825563	Hs.74111	AA304817	7.99	0.29	27.60	7.00	6.00	14	735.77	Germ Cell	Umbilical cord	Forsklin
5569	205907	Hs.112844	R96993	13.56	0.10	135.57	9.00	6.00	11	740.98	Thyroid	Pooled	Whole embryo
5576	140000	Hs.28478	RA4066	19.03	0.80	23.74	14.00	0.00	11	391.73	Liver	LID not found	Other
5579	121931	Hs.199101	T97889	6.70	1.00	6.70	1.00	1.00	1	629.01	CNS	Brain	LID not found
5580	828555	Hs.173231	AA256532	8.08	1.54	5.25	1.00	0.00	15	510.06	Placenta	Placenta	Kidney
5581	566760	Hs.108833	AA132084	39.04	6.92	5.84	1.00	0.00	1	325.53	Eye	Lung	Parathyroid
5588	203344	Hs.18523	H58028	55.52	7.08	7.84	4.00	0.00	1	261.25	Placenta	Pooled	Umbilical cord
5590	201254	Hs.17097	R98311	5.35	0.10	55.46	8.00	0.00	1	371.25	Blood	Germ Cell	Pooled
5619	121736	Hs.18213	T95075	18.48	3.60	5.13	1.00	0.00	3				
5629	22711	Hs.195501	T74714	6.74	0.31	21.48	6.00	6.00	6				
5632	140934	Hs.24613	R68994	7.95	0.81	9.85	1.00	0.00	10				
5633	122178	Hs.168919	T88815	11.89	0.38	31.82	7.00	6.00	8				
5637	79520	Hs.76305	T82415	29.36	4.86	5.92	1.00	1.00	1				
5640	139268	Hs.28621	R88492	16.45	1.86	8.38	10.00	0.00	1				
5641	292519	Hs.31731	N91311	177.34	33.13	5.35	1.00	0.00	11				
5644	136401	Hs.25087	R38181	85.42	0.28	303.03	9.00	8.00	1				
5646	292749	Hs.12259	N80491	14.30	2.54	5.63	1.00	0.00	1				
5649	246820	Hs.8215	N53133	708.28	32.69	23.97	10.00	0.00	1				
5656	140103	Hs.28646	R85993	16.59	1.75	10.60	10.00	0.00	1				
5661	345055	Hs.114670	W075331	41.53	5.41	7.88	1.00	0.00	1				
5662	245195	Hs.12808	N76587	9.47	0.95	9.85	5.00	4.00	20				
5669	294951	Hs.50042	N89514	8.80	0.54	16.34	4.00	2.00	9				
5667	126225	Hs.114696	R06311	65.89	8.58	7.68	5.00	0.00	16				
5668	487117	Hs.108439	AA045327	19.18	0.69	27.99	16.00	4.00	15				
5671	135791	Hs.10086	R33355	8.39	0.08	80.63	6.00	0.00	2				
5673	200604	Hs.35094	H48467	17.21	1.73	9.88	3.00	4.00	15				
5677	207881	Hs.126805	H60317	48.61	8.02	6.19	1.00	0.00	2				
5685	207866	Hs.182786	H60491	15.17	2.03	7.47	2.00	0.00	20				
5690	285590	Hs.194545	W02401	44.35	7.97	5.56	1.00	0.00	15				
5697	201229	Hs.176817	R09398	10.11	0.68	17.62	6.00	0.00	15				
5698	286084	Hs.50308	W02591	101.25	18.33	5.52	2.00	0.00	5				
5705	201981	Hs.18927	R99419	23.43	2.28	10.26	4.00	0.00	11				
5707	142851	Hs.107171	R71531	7.90	1.40	5.65	1.00	0.00	16				
5709	208994	Hs.37656	H60668	74.43	8.17	9.12	2.00	0.00	15				
5711	246377	Hs.184008	N52517	74.05	2.48	29.88	21.00	0.00	11				
5713	201314	Hs.36144	R96882	32.16	5.16	6.24	2.00	0.00	16				
5721	201317	Hs.36146	R96900	13.71	2.21	8.21	3.00	0.00	11				
5722	296559	Hs.50381	W00763	73.17	11.42	8.41	2.00	0.00	15				
5723	212542	Hs.21851	H68863	38.75	1.98	20.28	0.00	4.00	11				
5725	210548	Hs.76530	H65032	25.39	5.15	5.70	2.00	0.00	16				
5727	133713	Hs.78946	R32428	96.28	1.56	61.80	23.00	8.00	15				
5730	296568	Hs.50382	W00794	86.89	3.45	25.24	11.00	3.00	11				
5734	200307	Hs.88817	R06804	45.87	8.88	5.67	1.00	0.00	15				

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5736	298602	Hs.161528	W01026	66.30	11.18	5.83	1.00	0.00	19	103.95	Pancreas	LID not found	Other
5740	809508	Hs.20216	AA454554	10.22	0.52	19.64	9.00	0.00	-20	334.5	Head and neck	Parathyroid	Cervix
5744	809524	Hs.4289	AA455519	13.62	1.93	7.06	3.00	0.00	11	204.26	Placenta	Pool	Cervix
5756	284592	Hs.74615	N76193	20.72	3.90	5.32	0.00	1.00	16	390.76	Skin	Pool	Parathyroid
5758	481113	Hs.75929	AA136883	83.53	3.33	25.12	18.00	6.00	7	155.4	Ear	Uterus	Bone
5759	233845	Hs.18231	H78007	78.19	11.77	6.47	2.00	0.00	4	186.04	Lymph	Lung	Tonsil
5763	74593	Hs.78340	T58208	16.81	2.88	5.80	1.00	0.00	22	87.56	Ignore	Pool	Breast
5764	302591	Hs.109916	W03571	22.87	3.54	6.47	4.00	0.00	11	36.43	Bone marrow	Lymph node	Head and neck
5768	809892	Hs.82222	AA455145	7.16	1.00	7.16	2.00	6.00	17	54.82	Lymph	Pancreas	Placenta
5770	153025	Hs.2250	R50054	45.33	5.18	8.74	1.00	4.00	14	247.28	Marrow	Smooth muscle	Adipose
5771	668658	Hs.87150	AA232879	23.85	3.77	6.32	1.00	0.00	9	70.89	Prostate	Lung	LID not found
5772	549146	Hs.68054	AA083407	31.10	5.24	5.93	2.00	1.00	19	108.42	Smooth muscle	Nose	Adrenal gland
5779	204614	Hs.159554	H56918	179.16	2.48	89.32	8.00	0.00	2	412.17	Thyroid	Skin	Ovary
5780	241680	Hs.155986	H53249	41.81	2.48	18.79	10.00	0.00	6	468.75	Bone marrow	Adipose	Umbilical cord
5790	303046	Hs.161542	N91584	2048.09	340.93	8.00	2.00	0.00	20	216.1	Lymph node	Skin	Esophagus
5791	463536	Hs.30956	H09636	10.99	1.92	5.73	1.00	0.00	19	71.09	Whole embryo	Pool	Kidney
5796	177737	Hs.25180	H46683	6.79	0.52	13.06	6.00	0.00	1	576.3	Peritoneal	CNS	Blood
5798	289666	Hs.104119	N77779	43.57	0.43	102.03	9.00	8.00	11	400.33	Ear	Brain	Colon
5800	665774	Hs.79306	AA193254	98.62	7.44	13.28	6.00	0.00	4	51.94	Brain	Forebrain	Bone
5804	742101	Hs.73149	AA405891	14.67	1.00	14.67	0.00	2.00	6	428.92	Germ cell	Pancreas	Lymph
5808	34668	Hs.198353	R18676	11.16	0.43	23.73	11.00	5.00	7	118.71	Thymus	Skin	Adipose
5814	187147	Hs.110836	R83224	16.93	1.88	10.06	0.00	1.00	1	541.73	Adipose	Synovial mem.	Uterus
5816	34649	Hs.75309	R20379	680.72	66.33	7.07	1.00	0.00	15	631	Esophagus	Synovial mem.	Spleen
5818	811900	Hs.11116	AA454546	23.17	1.00	23.17	4.00	5.00	22	158.18	Liver	Pancreas	Spleen
5824	49509	Hs.198122	H15834	13.41	0.27	48.48	7.00	6.00	19	77.53	Ear	Muscle	Brain
5826	51447	Hs.763	H20972	7.47	1.00	7.47	0.00	2.00	12	311.24	Aorta	Forebrain	Forebrain
5827	767089	Hs.82845	AA424516	9.20	1.00	9.20	0.00	2.00	19	52.81	Bone marrow	Synovial mem.	-
5830	142122	Hs.80306	R69355	42.97	1.00	42.97	7.00	1.00	6	181.53	Pool	Placenta	-
5834	179500	Hs.38666	H51404	37.41	0.88	19.68	8.00	6.00	8	366.74	Tonsil	Forebrain	Larynx
5839	809598	Hs.73932	AA458472	36.49	5.47	6.67	0.00	2.00	7	40.71	Smooth muscle	Nose	Forebrain
5843	771173	Hs.81281	AA443497	102.30	10.56	9.68	1.00	0.00	22	119.23	Parathyroid	Kidney	CNS
5846	810331	Hs.77266	AA464152	198.59	8.65	22.97	14.00	2.00	6	132.5	Stomach	Nose	Breast
5850	42558	Hs.75335	R91229	87.09	4.82	14.33	2.00	3.00	11	57	Parathyroid	Whole embryo	LID not found
5852	41591	Hs.79085	R69212	24.80	1.28	19.15	18.00	2.00	11	218.81	Smooth muscle	Pancreas	Stomach
5854	210887	Hs.119222	H55676	62.51	0.69	90.34	14.00	0.00	7	458.63	Placenta	Gall bladder	Thymus
5859	687883	Hs.82101	AA258396	38.68	2.73	14.18	14.00	2.00	2	223.55	Neural	Tonsil	Germ cell
5863	310356	Hs.9813	W00888	34.95	3.16	10.99	3.00	4.00	10	479.44	Umbilical cord	Esophagus	-
5863	70489	Hs.168536	T48949	16.03	2.98	5.42	1.00	0.00	22	51.18	Larynx	Pool	Forebrain
5864	209246	Hs.6387	H63708	175.85	14.85	11.84	5.00	0.00	14	7.79	Adrenal gland	Prostate	Uterus
5869	788518	Hs.180012	AA452568	35.98	5.10	7.05	1.00	0.00	3	56.61	Synovial mem	Heart	Aorta
5871	843140	Hs.118778	AA465911	240.05	44.84	5.53	2.00	0.00	3	69.33	Adipose	Forebrain	-
5872	202587	Hs.22777	N52089	7.36	0.79	9.35	2.00	1.00	3	58.33	Adipose	Forebrain	-
5877	430318	Hs.81849	AA010609	48.12	5.90	7.82	1.00	0.00	3	58.33	Adipose	Forebrain	-
5883	826135	Hs.8724	AA521348	8.15	1.00	8.15	2.00	3.00	3	58.33	Adipose	Forebrain	-
5885	320251	Hs.37045	W07306	77.11	8.01	9.63	2.00	0.00	3	58.33	Adipose	Forebrain	-
5888	898218	Hs.77328	AA598801	215.21	5.62	38.31	4.00	3.00	3	58.33	Adipose	Forebrain	-
5901	827144	Hs.75574	AA521243	138.08	11.17	12.36	3.00	0.00	3	58.33	Adipose	Forebrain	-
5902	774036	Hs.11405	AA441895	185.44	10.42	11.29	4.00	1.00	3	58.33	Adipose	Forebrain	-
5903	725503	Hs.180015	AA292995	24.26	1.00	24.26	9.00	6.00	3	58.33	Adipose	Forebrain	-
5905	897887	Hs.152292	AA498809	23.85	2.84	8.40	4.00	0.00	3	58.33	Adipose	Forebrain	-
5918	138449	Hs.22451	R34205	19.93	2.48	7.92	1.00	1.00	3	58.33	Adipose	Forebrain	-
5918	954681	Hs.154782	AA251800	124.55	9.80	12.71	16.00	2.00	3	58.33	Adipose	Forebrain	-
5920	245147	Hs.107761	N76361	5.24	1.00	5.24	0.00	2.00	3	58.33	Adipose	Forebrain	-
5921	850607	Hs.197217	AA608548	216.08	34.83	6.20	1.00	0.00	3	58.33	Adipose	Forebrain	-
5922	703846	Hs.197926	AA278840	21.57	3.80	5.67	1.00	0.00	3	58.33	Adipose	Forebrain	-

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5923	615294	Hs.155975	AA461547	9.15	0.94	8.73	6.00	5.00	11	257.7	Lymph node	Tonsil	Blood
6024	705265	Hs.102518	AA280676	6.29	1.00	6.29	1.00	3.00			Tonsil	Pool	LID not found
5925	897616	Hs.215995	AA468663	11.97	0.84	14.27	7.00	8.00			Synovial mem	Thyroid	Blood
5930	585379	Hs.181875	AA135336	26.09	5.18	5.04	1.00	0.00	7	229.47	Pool	Brain	Blood
5933	39274	Hs.166091	R54358	12.51	1.99	6.28	1.00	0.00			Germ Cell	Lymph	Tonsil
5944	246541	Hs.105634	N77514	98.71	12.24	8.06	1.00	0.00	13	306.9	Small intestine	Synovial mem	Cervix
5954	109271	Hs.200246	T81261	69.82	11.93	5.85	2.00	0.00			Breast	Pool	LID not found
5960	195852	Hs.4082	R82197	10.07	1.72	5.86	1.00	1.00	1	737.93	Brain	Pool	LID not found
5984	191516	Hs.32775	H38146	7.53	1.00	7.53	0.00	1.00			Forebrain	Heart	Whole embryo
5988	195853	Hs.34559	R82310	13.98	0.99	14.12	6.00	0.00	2	545.1	Forebrain	Heart	Whole embryo
5989	325160	Hs.169330	W48780	151.48	3.30	45.89	20.00	4.00			Lymph node	Parathyroid	Umbilical cord
5972	242700	Hs.203563	H94163	16.35	1.55	10.55	2.00	2.00			Pool	Thymus	Adipose
5970	244781	Hs.34570	N54407	13.56	2.44	5.56	3.00	0.00	10	508.28	Pool	LID not found	Other
5981	145655	Hs.3461	H73727	724.91	86.19	8.41	1.00	0.00	9	378.02	Lymph node	Thymus	Adipose
5983	134235	Hs.23603	R31154	66.98	4.51	14.84	2.00	0.00	15	243.99	Placenta	Pool	Tonsil
5984	196125	Hs.34574	R97347	24.08	2.53	9.53	5.00	2.00			Eye	Parathyroid	Heart
5989	245531	Hs.102521	N77328	49.78	7.08	7.05	1.00	1.00			Forebrain	Pool	Parathyroid
5999	131583	Hs.126895	R24223	22.59	2.93	7.72	4.00	1.00			Placenta	Parathyroid	LID not found
6008	196350	Hs.184397	R92545	115.58	2.91	41.05	9.00	6.00			Pool	LID not found	Other
6009	470951	Hs.109946	AA034268	63.91	11.84	5.40	1.00	0.00	9	123.83	Aorta	Parathyroid	Kidney
6016	196345	Hs.154103	R92455	121.53	5.21	23.33	3.00	1.00	4	470.33	Muscle	Thyroid	Stomach
6023	136317	Hs.200340	N39325	90.01	17.57	5.12	1.00	0.00			Pool	LID not found	Other
6025	355333	Hs.108605	W95682	43.11	5.08	8.46	10.00	1.00	1	27	Adrenal gland	Colon	Germ Cell
6028	184401	Hs.204828	R93017	104.75	1.68	55.58	9.00	6.00	6	247			
6035	293663	Hs.185756	N94181	58.73	2.75	20.28	6.00	4.00					
6048	280122	Hs.171739	N49231	69.47	1.91	31.11	14.00	0.00					
6050	301082	Hs.91101	N91036	16.14	2.55	7.12	2.00	1.00	4	644.84	Ovary	Placenta	Heart
6062	136984	Hs.97277	R35849	13.06	2.01	6.49	4.00	0.00	3	159.78	Ovary	Aorta	Whole embryo
6074	285616	Hs.194329	N73975	112.87	20.53	5.50	2.00	0.00	X	279.45	Prostate	Breast	Whole embryo
6079	161988	Hs.141100	H25648	60.64	1.78	34.16	7.00	6.00	2	354.55	Thymus	Parathyroid	Germ Cell
6081	240637	Hs.40094	H90225	29.14	4.79	6.08	1.00	0.00			Parathyroid	LID not found	Other
6085	244722	Hs.191403	N25335	35.31	2.07	17.04	3.00	1.00	2	558.69	Pool	LID not found	Other
6086	470846	Hs.184738	AA031770	77.49	8.51	9.10	5.00	0.00	X	275.71	Ovary	Uterus	Tonsil
6091	322180	Hs.111465	W97882	8.03	1.39	5.79	1.00	0.00			Parathyroid	Aorta	Lymph
6095	417305	Hs.193212	W90001	11.16	2.17	5.15	1.00	0.00			Forebrain	Pool	LID not found
6097	295592	Hs.40154	N73535	6.18	1.00	6.18	1.00	0.00	6	64.18	Germ Cell	Uterus	Cervix
6099	418611	Hs.132756	W96469	5.53	0.92	6.00	1.00	0.00			Pancreas	Pool	LID not found
6107	271699	Hs.187591	N31577	27.74	4.08	6.80	2.00	0.00	5	626.75	Ear	Small intestine	Eye
6110	233299	Hs.197008	H77506	98.69	7.25	13.62	3.00	1.00			Ear	Lymph	Muscle
6123	377281	Hs.63913	AA054878	9.90	0.17	59.36	8.00	6.00	1	28.08	Liver	Ear	Skin
6130	233071	Hs.203125	H75632	5.86	1.10	5.39	1.00	0.00	9	252.77	Pool	Thyroid	Tonsil
6131	212438	Hs.208980	H93528	56.01	5.04	11.51	1.00	0.00			Stomach	Adipose	Parathyroid
6132	609685	Hs.6309	AA454659	82.46	14.27	5.78	1.00	0.00	12	245.91	Skin	Aorta	Parathyroid
6135	308497	Hs.11147	N95760	54.15	4.08	12.54	9.00	3.00			Gall bladder	Tonsil	Parathyroid
6148	504555	Hs.21586	AA150093	12.98	0.00	129762.50	5.00	0.00	X	120.82	Esophagus	Gall bladder	Tonsil
6148	266161	Hs.39001	N21592	11.29	0.10	112.66	9.00	6.00			Nose	Forebrain	LID not found
6160	376643	Hs.42572	AA046112	8.40	1.18	7.13	1.00	0.00	12	415.54	Forebrain	Heart	LID not found
6167	785741	Hs.26941	AA460302	8.82	1.00	6.92	0.00	2.00	18	351.24	Breast	Placenta	Eye
6172	428168	Hs.173637	AA001870	26.76	3.81	6.85	1.00	0.00	6	366.05	Eye	Pool	Ovary
6176	303139	Hs.13528	N90808	31.38	0.99	31.84	11.00	5.00			Bone	Cervix	Kidney
6180	280033	Hs.141350	N87051	46.32	6.74	8.87	2.00	0.00	10	417.35	Pool	LID not found	Other
6184	281443	Hs.42812	H98688	65.23	11.53	5.66	1.00	0.00			Parathyroid	Forebrain	Heart
6187	418655	Hs.24128	W97281	5.88	1.00	5.88	0.00	1.00	4	455.55	Placenta	Pool	LID not found
6180	428936	Hs.15817	AA014852	47.68	0.00	4768220.91	14.00	0.00			Pool	Pool	Pool
6200	291384	Hs.106813	N72286	16.43	2.75	6.12	2.00	2.00	8	375.88	Forebrain	Breast	Breast
6211	702233	Hs.244174	AA431721	8.53	0.56	15.22	3.00	2.00	19	34.66	Marrow	Breast	Ovary

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6215	291712	Hs.27172	N67839	24.87	0.55	45.22	9.00	6.00	11	277.16	Blood	Fore skin	Colon
6220	213850	Hs.39384	H72368	20.72	3.59	5.78	0.00	1.00	11	131.77	Whole embryo	Ovary	Kidney
6222	502165	Hs.208507	A126862	26.22	0.00	2621782.14	12.00	2.00	4	173.52	Adrenal gland	Fore skin	Uterus
6226	488886	Hs.13755	A045066	7.84	1.00	7.94	4.00	1.00				Pancreas	Prostate
6227	810298	Hs.24211	A446420	16.57	3.13	5.28	1.00	0.00				Ovary	Ovary
6230	358785	Hs.18028	A001138	13.21	2.00	6.82	5.00	0.00				Pool	Pool
6232	376476	Hs.164697	A041362	13.93	2.33	5.97	0.00	1.00				Heart	Muscle
6235	346583	Hs.24212	W74533	65.68	5.89	11.14	9.00	0.00	1	363.82	Smooth musc	Fore skin	CNS
6239	504761	Hs.135560	A148735	7.18	0.10	71.85	6.00	6.00	18	226.52	Smooth musc	Spleen	CNS
6244	229660	Hs.203245	H68542	23.67	0.39	61.41	8.00	5.00	2	190.59	Pooled	Parathyroid	Brain
6246	297731	Hs.68732	N05908	44.42	7.22	6.15	1.00	0.00		743.9			
6250	809374	Hs.48500	A4456589	99.16	4.84	21.37	11.00	3.00	4	104.13	Small intestine	Colon	LID not found
6252	428514	Hs.191320	A0004812	5.49	0.45	12.31	2.00	0.00			LID not found	Cervix	Cervix
6256	745003	Hs.29222	A0625012	7.91	1.07	7.37	2.00	0.00	6	136.98	Cervix	Breast	Placenta
6257	428476	Hs.11050	AA000464	18.00	1.23	14.63	3.00	0.00	6	201.27			
6258	795640	Hs.71561	AA459915	5.92	0.56	10.85	1.00	0.00			Testis	Germ Cell	Eye
6263	327239	Hs.192873	AA284307	11.59	1.94	5.98	1.00	0.00	18	115.51	Heart	LID not found	Other
6270	321574	Hs.31305	W32778	12.15	2.20	5.51	0.00	1.00					
6275	234131	Hs.178543	H76608	252.22	29.06	8.68	2.00	0.00					
6278	323028	Hs.190009	W42414	34.49	3.80	9.07	7.00	0.00	15	219.74	Adipose	Thyroid	Blood
6285	327185	Hs.55268	AA284248	15.88	2.74	5.78	0.00	1.00			Prostate	Heart	Kidney
6286	324437	Hs.789	W49900	170.76	1.29	132.43	22.00	3.00	4	450.37	Stomach	Pancreas	Pancreas
6287	365877	Hs.174117	AA025662	44.04	7.90	5.57	2.00	0.00			Parathyroid	Lymph	Germ Cell
6289	748293	Hs.14828	AA404239	84.68	3.51	24.09	0.00	1.00	1	718.95	CNS	Stomach	Bone
6288	505647	Hs.78521	AA150891	18.22	0.00	1822154.96	4.00	0.00	4	610.99	Tonsil	Uterus	CNS
6300	209389	Hs.193433	W61150	187.89	33.45	5.62	1.00	0.00	2	714.07		Parathyroid	CNS
6301	322443	Hs.56314	W16424	30.72	3.14	9.77	2.00	2.00	2	467.75		Head and nec	Stomach
6303	321470	Hs.173208	W32363	11.39	1.36	8.39	1.00	0.00	5	154.93	Head and nec	Stomach	Umbilical cord
6304	501148	Hs.78743	AA156030	13.09	0.21	62.35	9.00	6.00			Testis	Parathyroid	Pool
6311	321837	Hs.103014	W32338	8.12	1.00	6.12	1.00	0.00	11	219.64	Neural	Lymph	Adrenal gland
6313	325128	Hs.40587	W49781	11.60	1.00	11.60	4.00	3.00			Eye	LID not found	Other
6320	223274	Hs.308	H66518	8.08	0.25	31.84	8.00	6.00			Uterus	Lymph	Lung
6321	501868	Hs.49597	AA128005	19.13	2.73	7.01	0.00	3.00	2	637.61	Pooled	Muscle	Uterus
6330	491435	Hs.179759	AA150435	17.88	0.91	19.68	5.00	3.00	2	560.82		Blood	Whole embryo
6335	324383	Hs.50666	W51760	27.48	1.65	16.70	20.00	1.00	4			Germ Cell	Lung
6337	271899	Hs.44708	N35241	40.53	3.41	11.90	1.00	0.00			Fore skin	Germ Cell	Lung
6342	765297	Hs.173422	AA461304	11.53	1.58	7.32	1.00	1.00	9	141.38	Synovial mem	Adipose	Lymph
6343	51383	Hs.79015	H23979	326.98	0.57	575.24	20.00	6.00	3	383.43	Thyroid	Ear	Spleen
6345	489235	Hs.180946	AA027277	25.85	1.66	15.81	10.00	0.00	1	257.88	Umbilical cord	Omentum	Thyroid
6346	530545	Hs.48269	AA112978	8.24	1.00	8.24	2.00	0.00	14	260.52	Neco	Stomach	Lymph
6351	509641	Hs.146360	AA055323	478.17	43.45	10.52	0.00	3.00	11	18.88	Nose	Skin	Adipose
6362	249806	Hs.19012	H64815	23.49	2.98	7.66	1.00	0.00			Pooled	Ovary	Fore skin
6367	245890	Hs.110440	N55459	745.41	10.61	70.26	7.00	3.00	16	381.71	Liver	Prostate	Pool
6368	85614	Hs.11000	T62031	47.14	0.84	56.44	9.00	6.00	8	105.18	Lymph	Liver	Aorta
6369	744800	Hs.19718	AA644448	7.62	1.00	7.62	0.00	1.00	1	93.79	Penipha al ner	Rone	Germ Cell
6370	633809	Hs.24950	AA668470	97.76	12.06	8.11	2.00	4.00	1	592.98	Adrenal gland	Aorta	Smooth muscle
6374	455123	Hs.77694	AA676805	47.67	7.11	6.69	2.00	4.00	8	477.99	Smooth musc	Gall bladder	Placenta
6375	766894	Hs.1678	AA460685	47.71	4.79	9.95	2.00	0.00			Pancreas	Bone	Whole embryo
6376	85660	Hs.11006	T62088	8.48	1.17	7.22	1.00	0.00			Breast	Liver	Adrenal gland
6377	877782	Hs.173737	AA628787	8.34	0.55	15.16	7.00	5.00			Blood	Testis	Ovary
6378	745433	Hs.104481	AA625859	8.87	1.20	7.45	1.00	0.00	22	135.46	Synovial mem	Larynx	Cervix
6379	948971	Hs.181243	AA600217	489.97	71.74	6.83	1.00	0.00	1	92.6	Small intestine	Pooled	Adipose
6384	73635	Hs.82911	T55728	187.01	28.34	6.37	2.00	0.00	17	452.42	Neural	Ear	Head and neck
6387	854760	Hs.181037	AA630507	344.28	32.95	10.45	2.00	0.00			Smooth musc	Pooled	CNS
6392	79632	Hs.11032	T62838	38.75	6.13	6.33	1.00	0.00	10	188.68	Stomach	Whole embryo	Blood
6395	795383	Hs.155924	AA464861	38.43	1.00	36.43	2.00	2.00			346.37	Heart	
6400	79655	Hs.11039	T62655	17.46	1.90	9.21	0.00	1.00	1				

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5402	45502	Hs.104717	H15662	19.23	2.85	6.75	2.00	1.00	11	247.34	Larynx	Bone	Ovary
5403	45980	Hs.2575	H15456	40.82	1.66	40.82	2.00	2.00	4	24.02	Stomach	Adrenal gland	Liver
5404	67316	Hs.6957	T49222	8.62	1.66	5.21	2.00	0.00	4	357.89	Lymph node	Nose	Colon
5405	740742	Hs.75912	AA475691	23.05	2.22	10.41	4.00	0.00	2		Adrenal gland	Heart	Gall bladder
5407	731428	Hs.49765	AA412064	6.23	1.00	6.23	2.00	2.00	19	82.52	Adrenal gland	Cervix	Stomach
5409	358443	Hs.23111	V96450	20.05	1.05	19.10	3.00	0.00	10		Spleen	Tonsil	Ovary
5410	742763	Hs.96465	AA400186	10.99	1.31	8.39	2.00	1.00	10	471.64	Adrenal gland	Thyroid	Breast
5426	489810	Hs.155489	AA102089	7.48	0.83	9.03	6.00	5.00	16	361.71	CNS	Whole embryo	Adrenal gland
5435	641217	Hs.24809	AA465736	94.33	6.00	10.82	3.00	2.00	2	97.87	Gall bladder	Ovary	Liver
5436	742818	Hs.169411	AA400482	22.71	2.29	9.94	1.00	0.00	11	48.91	Thymus	Pool	Cervix
5441	32681	Hs.17054	R43541	21.24	1.18	18.04	10.00	0.00	3	347.25	Ear	Stomach	Umbilical cord
5442	727660	Hs.75512	R49405	92.81	10.39	8.94	2.00	0.00	3	448.51	Bone marrow	CNS	Larynx
5443	784174	Hs.6998	AA432106	72.21	11.18	6.46	2.00	0.00	4		Brain	CNS	Tonsil
5446	897623	Hs.170311	AA596576	118.52	20.11	5.89	1.00	0.00	22	51.16	Germ Cell	Brain	Pool
5448	41432	Hs.22507	R59516	30.98	0.31	60.44	20.00	6.00	17	306.96	Head and neck	Synovial mem	Gall bladder
5453	50302	Hs.26830	H17273	10.44	2.05	5.09	1.00	0.00	6	119.25	Forebrain	LID not found	Other
5458	103377	Hs.21635	T77733	92.06	11.85	6.86	4.00	0.00	2	30.01	Brain	LID not found	Other
5460	262864	Hs.182826	H96468	1188.07	208.47	5.09	1.00	0.00	1	718.95	Eye	-	Whole embryo
5461	51216	Hs.26802	H18471	7.78	1.14	6.85	1.00	1.00	1		Pool	Germ Cell	Aorta
5471	839904	Hs.115458	AA480058	157.13	17.65	8.91	0.00	1.00	5	510.96	Neural	Umbilical cord	Thyroid
5473	50842	Hs.23054	H17550	31.29	2.26	13.87	8.00	2.00	5	121.59	Cervix	Lymph	Adrenal gland
5474	450947	Hs.182643	AA136533	525.14	56.95	8.91	1.00	0.00	6	517.22	CNS	Spleen	Tonsil
5476	825780	Hs.54602	AA183378	178.88	33.69	5.25	1.00	0.00	11	237.93	Trachea	Parathyroid	Thyroid
5482	656187	Hs.64131	AA630628	168.23	21.05	7.90	3.00	0.00	2	428.89	Ear	Tactile	Tactile
5484	415415	Hs.165593	V98118	1056.08	204.18	5.17	1.00	0.00	12		Forebrain	LID not found	Other
5488	75475	Hs.23029	T57637	45.93	6.43	5.45	1.00	0.00	22	221.51	Adipose	Tactile	Tactile
5490	743230	Hs.120980	AA400234	77.98	13.72	5.68	1.00	0.00	2		Forebrain	LID not found	Other
5491	281847	Hs.81825	N51830	8.29	0.00	52.94	5.78	0.00	22	139.49	Neural	Nose	Blood
5492	743532	Hs.100931	AA409421	306.34	52.94	5.78	0.00	1.00	19	-8.83	Forebrain	Uterus	Lung
5494	509800	Hs.151466	AA045985	78.70	13.33	5.98	2.00	1.00	11	317.39	Breast	Forebrain	Tonsil
5500	308484	Hs.55041	N94368	31.76	1.00	31.75	6.00	2.00	3	158.75	Germ Cell	Pool	Whole embryo
5516	897581	Hs.108957	AA156054	292.60	28.37	10.31	2.00	1.00	7	640.55	CNS	Prostate	Prostate
5519	897581	Hs.198182	AA497026	23.12	9.03	12.61	1.00	0.00	10	549.05	Germ Cell	Blood	Brain
5524	281633	Hs.50272	N73448	113.94	9.03	12.61	1.00	0.00	7	489.94	Mouth	Ear	Bone
5527	742542	Hs.184326	AA400010	11.21	1.00	11.21	4.00	4.00	11	221.81	Ear	Testis	Testis
5531	377051	Hs.30907	AA057020	41.35	0.57	72.91	9.00	6.00	X	93.35	Breast	Thyroid	Forebrain
5532	488271	Hs.44259	AA088214	41.62	8.13	5.12	1.00	0.00	1	77.55	Thymus	Heart	Brain
5548	416951	Hs.155160	W87714	35.88	3.60	9.90	8.00	3.00	9	46.83	Tonsil	CNS	Muscle
5548	259417	Hs.44288	N31865	5.21	0.00	520897.94	1.00	0.00	17	318.05	Stomach	Forebrain	Pool
5551	322461	Hs.35198	W15305	8.33	1.00	6.33	0.00	2.00	105.12	Ear	Brain	Forebrain	Forebrain
5554	280000	Hs.18275	N36891	8.83	0.50	13.28	3.00	1.00	485.36	Pool	Forebrain	Adipose	Gall bladder
5555	809466	Hs.30928	AA443094	15.77	2.51	6.28	1.00	0.00	575.4	Esophagus	Placenta	CNS	CNS
5563	810315	Hs.31137	AA464542	7.68	1.00	7.69	0.00	1.00	193.79	Skin	Placenta	CNS	Bone
5570	414894	Hs.178573	V93087	39.07	2.81	13.44	3.00	6.00	371.74	Thymus	CNS	CNS	Heart
5578	487151	Hs.62264	AA043760	33.80	2.26	21.82	3.00	1.00	337.32	Ovary	CNS	Gall bladder	Forebrain
5591	199198	Hs.173983	R95841	254.86	11.78	18.77	2.00	1.00	721.45	Ear	Forebrain	Forebrain	Forebrain
5595	264162	Hs.31248	N20480	16.77	1.00	18.77	2.00	1.00					
5599	305955	Hs.35488	AA043598	167.30	9.64	17.36	3.00	1.00					
5600	602625	Hs.47089	AA134576	39.90	4.27	9.34	2.00	3.00					
5602	271830	Hs.178839	N35155	39.36	3.93	10.01	3.00	0.00					
5603	468575	Hs.151408	AA047289	13.91	2.49	5.56	0.00	1.00					
5607	199637	Hs.35580	R96523	15.18	1.28	11.82	4.00	1.00					
5608	292082	Hs.28681	N73309	160.67	27.75	5.78	1.00	0.00					
5610	810781	Hs.18387	AA481755	25.05	1.92	13.07	4.00	3.00					
5618	346308	Hs.47125	W74133	5.47	1.00	5.47	1.00	0.00					
5626	809718	Hs.206738	AA465479	17.72	0.00	1772206.20	14.00	0.00					
5627	206052	Hs.10198	H61552	30.53	2.81	10.88	3.00	1.00					

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6029	487371	Hs.61061	A4046700	12.41	0.59	21.21	5.00	6.00	8	476.7	Gall bladder	Bone	Muscle
6032	770454	Hs.108069	AA427601	67.69	9.14	7.40	3.00	1.00	19	73.73	Nose	Skull	Placenta
6034	137276	Hs.26156	R36587	55.89	8.52	6.56	1.00	1.00	9	417.73	Skin	Gall bladder	Foreskin
6036	858204	Hs.172014	AA633882	231.41	29.55	7.83	2.00	2.00	12	241.69	Thyroid	CNS	Uterus
6039	375718	Hs.10491	AA033743	38.77	2.35	18.47	18.00	2.00	6	117.94	Peripheral nei	Adipose	Bone
6040	811139	Hs.181366	AA485739	109.53	7.28	15.04	1.00	5.00	6	117.94	Small intestine	Thymus	Lung
6042	293338	Hs.93005	N64741	25.65	1.00	20.65	8.00	2.00	10	490.38	Foreskin	Skin	Blood
6043	428721	Hs.140493	AA024638	119.65	1.00	119.65	10.00	6.00	10	490.38	Foreskin	Skin	Blood
6047	327228	Hs.206457	AA284304	48.89	9.70	5.04	1.00	0.00	7	656.9	Pooled	Lung	Brain
6048	854444	Hs.73831	AA689055	20.16	1.00	20.16	0.00	6.00	6	118.71	Thymus	Skin	Adipose
6050	201559	Hs.81022	R97055	383.27	30.80	11.80	2.00	0.00	17	305.6	Pool	LID not found	Other
6051	288846	Hs.169104	N62601	5.07	0.25	20.10	5.00	3.00	7	132.75	Peripheral nei	Foreskin	Muscle
6055	272262	Hs.7913	N35592	7.29	1.00	7.29	0.00	1.00	7	132.75	Peripheral nei	Foreskin	Muscle
6059	447509	Hs.72830	AA702254	180.52	11.59	16.43	10.00	0.00	18	381.91	Ear	Pooled	Whole embryo
6067	347520	Hs.116321	W81260	8.82	0.69	15.14	1.00	0.00	18	381.91	Ear	Pooled	Parathyroid
6068	364547	Hs.83125	AA022910	11.02	1.45	7.61	1.00	0.00	8	118.83	Adipose	Placenta	LID not found
6069	141726	Hs.163358	R69584	9.35	0.03	33.25	10.00	5.00	13	146.89	CNS	Thyroid	Tonsil
6070	487777	Hs.75770	AA045162	35.47	4.74	7.49	1.00	1.00	13	146.89	CNS	Thyroid	Tonsil
6072	72395	Hs.159533	TS1539	11.69	1.00	11.69	7.00	5.00	6	117.28	Testis	LID not found	Other
6074	302987	Hs.32822	N91145	21.72	4.11	5.28	1.00	0.00	6	117.28	Testis	LID not found	Other
6077	485894	Hs.61763	AA089523	16.52	1.04	17.84	3.00	3.00	22	107.16	Omentum	Heart	Parathyroid
6078	771328	Hs.105133	AA476221	13.53	1.00	13.53	0.00	1.00	22	107.16	Omentum	Heart	Parathyroid
6080	611443	Hs.116836	AA176581	11.86	0.38	30.82	9.00	6.00	8	118.83	Adipose	Placenta	LID not found
6082	359269	Hs.83396	AA016225	23.98	0.10	232.42	9.00	6.00	11	38.04	Cervix	Ear	Lymph
6085	356732	Hs.168813	W84486	24.04	4.60	5.23	0.00	1.00	3	284.7	Placenta	Aorta	Bone
6087	487082	Hs.58636	AA045276	76.39	6.80	11.54	6.00	1.00	8	440.23	Muscle	Foreskin	Heart
6089	269433	Hs.93405	N26175	112.45	20.12	5.59	1.00	0.00	11	38.04	Cervix	Ear	Lymph
6090	856469	Hs.29304	AA633549	13.41	1.00	13.41	6.00	1.00	3	284.7	Placenta	Aorta	Bone
6701	480232	Hs.182018	AA121313	12.81	1.15	10.92	4.00	0.00	12	343.62	Adipose	Ear	Breast
6703	137684	Hs.30343	R63085	16.50	1.00	16.50	9.00	3.00	15	230.38	Uterus	Lymph	Heart
6704	435434	Hs.75627	AA701476	8.15	0.40	20.14	4.00	0.00	8	440.23	Muscle	Foreskin	Heart
6706	264166	Hs.172458	N20482	10.89	1.00	10.89	4.00	0.00	15	230.38	Uterus	Lymph	Heart
6719	810041	Hs.187111	AA455282	6.06	0.18	33.50	6.00	4.00	12	343.62	Adipose	Ear	Breast
6720	783256	Hs.196172	AA454058	27.04	3.19	8.47	2.00	0.00	15	230.38	Uterus	Lymph	Heart
6725	756508	Hs.57698	AA436425	14.77	1.28	11.55	3.00	0.00	8	118.83	Adipose	Placenta	LID not found
6730	796278	Hs.90304	AA408038	11.29	1.85	9.82	2.00	0.00	15	230.38	Uterus	Lymph	Heart
6731	841398	Hs.190581	AA487543	8.54	1.00	8.54	1.00	2.00	17	306.68	Ignore	Small intestine	Lymph
6737	854668	Hs.3581	AA630082	55.50	7.78	7.13	1.00	0.00	12	343.62	Adipose	Ear	Breast
6739	83029	Hs.15113	T67807	6.02	0.03	224.44	1.00	0.00	3	421.89	Liver	Pool	Esophagus
6741	525799	Hs.63061	AA074446	10.47	1.12	9.35	1.00	0.00	15	230.38	Uterus	Lymph	Heart
6742	868882	Hs.48876	AA879352	75.52	0.55	137.31	9.00	6.00	8	118.83	Adipose	Placenta	LID not found
6745	470279	Hs.31622	AA023905	25.92	3.03	8.56	7.00	0.00	17	306.68	Ignore	Small intestine	Lymph
6746	435038	Hs.3416	AA700054	95.70	7.52	12.72	8.00	3.00	19	253.9	Pooled	CNS	Breast
6747	743180	Hs.58044	AA401429	41.47	2.67	15.54	9.00	0.00	11	367.56	Brain	Uterus	Testis
6750	39722	Hs.99867	R54462	27.21	0.11	254.38	9.00	6.00	16	500.84	Ignore	Colon	Uterus
6751	51644	Hs.6136	H20370	20.54	0.00	2054271.13	12.00	3.00	1	121.02	Small intestine	Thymus	Cervix
6753	757222	Hs.59889	AA496149	6.26	0.00	625675.33	1.00	0.00	20	11.02	Esophagus	Skull	Eye
6757	51320	Hs.192858	H20547	5.76	0.00	575768.31	1.00	0.00	1	121.02	Small intestine	Thymus	Cervix
6758	884867	Hs.184242	AA689443	211.85	1.87	126.88	9.00	6.00	1	121.02	Small intestine	Thymus	Cervix
6759	45807	Hs.6184	H08210	7.48	0.45	16.48	1.00	0.00	1	121.02	Small intestine	Thymus	Cervix
6760	50344	Hs.21273	H17003	6.34	0.72	5.77	1.00	0.00	1	121.02	Small intestine	Thymus	Cervix
6701	731116	Hs.156114	AA417279	67.52	6.74	7.73	5.00	1.00	20	11.02	Esophagus	Skull	Eye

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Table 3A

6782	725901	Ms.3053	AA397823	6.18	1.00	2.81	1.00	0.00	6	377.78	Lymph	Ovary	LID not found
6784	22374	Ms.50860	T82450	66.53	2.81	23.32	13.00	1.00	14	156.12	Pancreas	Tonsil	Eye
6785	299360	Ms.118962	H75581	84.67	8.03	8.06	1.00	0.00	19	234.91	Colon	Head and nec Gall bladder	Pooled
6786	848894	Ms.198006	AA669452	180.84	3.57	50.66	9.00	6.00	15	236.91	Brain	LID not found	Other
6771	154172	Ms.117332	R32030	8.68	0.00	868266.09	1.00	1.00	1	553.18	Synovial mem	Thymus	Thyroid
6772	22376	Ms.13208	T82461	30.94	5.32	5.82	2.00	0.00	11	227.6	Germ Cell	Lung	Tonsil
6773	23658	Ms.208825	R38168	8.42	0.55	15.32	7.00	6.00	3	41.9	Whole embryo	Brain	Blood
6774	725321	Ms.198584	AA281749	14.37	1.00	14.37	0.00	2.00	10	362.28	Peripharal nec	Thymus	Blood
6777	360042	Ms.8068	AA074535	57.38	5.52	10.40	0.00	3.00	20	104.01	Cervix	Blood	Thyroid
6783	51631	Ms.0278	H20543	17.05	1.09	15.68	1.00	0.00	19	80.38	Omentum	Note	CNS
6784	4789	Ms.21320	R8197	14.53	2.19	6.64	1.00	0.00	1	95.21	Aorta	Ear	CNS
6786	588895	Ms.165531	AA133577	63.17	2.50	25.27	7.00	6.00	6	143.7	Ignore	Small intestine	Skin
6800	47460	Ms.21391	H11454	38.56	6.50	5.93	1.00	0.00	1	-3.15	Thymus	Cervix	Foreskin
6802	743604	Ms.173497	AA634360	48.45	5.05	9.80	1.00	0.00	X	288.38	Ear	Pool	Pooled
6809	360240	Ms.155572	AA012939	13.32	2.13	8.27	1.00	0.00	1	75.41	Aorta	Pool	Parathyroid
6811	730555	Ms.82848	AA435948	25.45	3.55	7.18	2.00	0.00	10	350.47	Gall bladder	Ear	Skin
6814	26598	Ms.74089	R39111	17.06	1.53	11.14	1.00	3.00	5	95.9	Tonsil	Colon	Brain
6817	841314	Ms.188892	AA487218	12.77	0.44	28.10	7.00	5.00	4	182.35	Testis	Pool	LID not found
6819	810801	Ms.160780	AA458878	9.55	1.00	9.55	8.00	4.00	5	504.62	CNS	Testis	Tonsil
6821	41896	Ms.90081	R39221	14.09	0.01	1115.20	11.00	0.00	2	102.83	Cervix	LID not found	Other
6822	261184	Ms.107787	H88215	20.67	1.87	11.06	1.00	0.00	3	566.66	Brain	Muscle	Whole embryo
6825	32309	Ms.9270	R42713	18.74	1.83	6.73	2.00	0.00	K	315.05	Parathyroid	Lung	LID not found
6828	263108	Ms.5588	H89537	6.38	1.00	6.38	3.00	4.00	18	398.89	Brain	Ear	Pooled
6832	41739	Ms.106432	R52679	9.15	0.94	9.71	1.00	0.00	19	250.4	Pooled	Spleen	Brain
6845	782380	Ms.98723	AA431400	5.77	0.45	12.58	1.00	0.00	2	437.23	Epididymis	Brain	Aorta
6847	344487	Ms.41088	W73514	28.85	3.71	7.79	2.00	1.00	17	483.28	Synovial mem	Pooled	Umbilical cord
6850	346494	Ms.56368	W73868	9.53	0.09	111.93	1.00	0.00	6	118.05	Testis	Brain	Heart
6851	510780	Ms.109631	AA102053	66.78	9.03	7.40	5.00	0.00	13	273.85	Gall bladder	Tonsil	LID not found
6856	40449	Ms.106443	R53258	43.97	8.15	5.39	1.00	0.00	2	156	Thyroid	Skin	Uterus
6857	23275	Ms.75862	R39273	60.60	6.92	8.75	5.00	0.00	9	382.37	Adipose	Pool	LID not found
6859	841195	Ms.165988	AA487070	85.89	4.78	13.84	4.00	0.00	11	369.17	Foreskin	Breast	Brain
6866	564747	Ms.71146	AA136521	6.39	0.27	23.08	1.00	0.00	5	-5.87	Thyroid	Placenta	Heart
6867	41853	Ms.153924	R32703	15.94	2.39	6.60	1.00	0.00	2	30.01	Synovial mem	Small intestine	LID not found
6871	589853	Ms.66180	AA156109	12.41	1.10	11.27	1.00	0.00	3	162.18	Pool	LID not found	Other
6875	41070	Ms.106571	R56100	9.76	0.10	97.61	9.00	8.00	9	24.47	Pool	Foreskin	Muscle
6878	897593	Ms.8720	AA486846	19.04	0.31	80.58	1.00	0.00	9	407.28	Parathyroid	Lung	Prostate
6878	809736	Ms.23862	AA454713	19.84	2.43	8.17	2.00	0.00	9	407.28	Parathyroid	Lung	Breast
6885	50815	Ms.80288	H17513	61.18	12.08	5.06	1.00	0.00	2	302.37	Adipose	Pool	LID not found
6881	323704	Ms.144232	W44657	17.36	2.22	7.82	1.00	0.00	3	162.18	Pool	LID not found	Other
6883	773142	Ms.8035	AA425375	24.15	4.53	5.33	1.00	0.00	3	24.47	Pool	Foreskin	Muscle
6900	28111	Ms.6808	N70768	11.44	2.05	6.59	1.00	0.00	9	407.28	Parathyroid	Lung	Breast
6902	564514	Ms.70849	AA121687	20.51	3.73	5.50	1.00	0.00	2	30.01	Synovial mem	Small intestine	LID not found
6910	84068	Ms.7100	T70922	85.76	18.70	5.13	1.00	0.00	2	162.18	Pool	LID not found	Other
6914	121256	Ms.203347	T96505	24.45	4.00	6.11	2.00	0.00	3	162.18	Pool	LID not found	Other
6918	265625	Ms.27265	N22827	31.77	4.75	6.68	1.00	0.00	3	162.18	Pool	LID not found	Other
6922	795608	Ms.13865	AA460004	46.37	7.88	5.81	1.00	0.00	9	24.47	Pool	Foreskin	Muscle
6923	347293	Ms.24222	W80808	7.69	0.68	11.84	2.00	0.00	9	24.47	Pool	Foreskin	Muscle
6958	124239	Ms.16162	R02333	6.76	0.16	35.73	1.00	0.00	9	24.47	Pool	Foreskin	Muscle
6959	276519	Ms.75323	N39101	34.38	1.75	19.68	3.00	0.00	9	24.47	Pool	Foreskin	Muscle
6962	238534	Ms.13997	N52878	5.51	0.00	561057.04	1.00	0.00	9	24.47	Pool	Foreskin	Muscle
6972	239515	Ms.182748	H76538	55.98	8.07	6.83	2.00	0.00	9	24.47	Pool	Foreskin	Muscle
6983	340742	Ms.27857	W66303	12.77	2.36	5.42	1.00	0.00	9	24.47	Pool	Foreskin	Muscle
6986	125118	Ms.191120	R05283	38.74	7.03	5.51	1.00	0.00	9	24.47	Pool	Foreskin	Muscle
6992	344618	Ms.42881	W74725	7.68	0.55	13.97	7.00	6.00	9	24.47	Pool	Foreskin	Muscle
7000	251827	Ms.21734	N72976	7.25	0.78	9.27	1.00	0.00	9	24.47	Pool	Foreskin	Muscle
7003	322175	Ms.132146	W37778	55.49	4.75	11.69	4.00	6.00	9	24.47	Pool	Foreskin	Muscle

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Table 3A

7007	259805	Hs.165986	N32919	69.52	14.47	6.19	1.00	0.00	14	119.02	Bone	Muscle	Uterus
7012	294635	Hs.179114	N71028	6.27	1.00	6.27	0.00	2.00	11	227.2	Heart	LID not found	Other
7013	344595	Hs.55412	N73634	5.79	0.63	9.26	1.00	1.00					
7015	323798	Hs.102502	AA284298	8.05	1.00	8.05	2.00	3.00	11	114.29	Uterus	Lymph	Ovary
7016	503338	Hs.11145	AA130187	31.10	1.17	26.65	6.00	2.00			Uterus	Colon	Brain
7017	489800	Hs.148246	AA099820	7.85	1.11	6.88	2.00	0.00			Pooled	Muscle	Ovary
7018	810224	Hs.72157	AA464691	49.43	2.49	19.86	5.00	5.00			Muscle	Blood	Heart
7024	468221	Hs.146185	AA044059	125.80	24.77	5.08	1.00	0.00	6	489.21	Adipose	Pooled	Aorta
7026	376217	Hs.72803	AA039547	25.62	2.94	8.70	1.00	0.00	17	83.8	Gall bladder	Pool	Placenta
7028	208027	Hs.108194	H59780	12.40	1.21	10.27	4.00	0.00			Whole embryo	Ovary	Uterus
7030	418256	Hs.98653	N98145	24.76	3.24	7.64	2.00	0.00			Tonsil	Prostate	Prostate
7039	324654	Hs.134353	N47116	6.14	1.00	6.14	1.00	0.00	10	508.28	Foreskin	Breast	Placenta
7043	268259	Hs.101777	N30006	81.41	11.37	7.16	2.00	0.00	7	472.66	Ignore	Lymph node	Tonsil
7050	325015	Hs.5671	N48838	20.22	0.11	188.19	9.00	5.00			Aorta	Breast	Tonsil
7053	321888	Hs.101789	N48838	17.28	0.81	21.29	1.00	0.00	12	53.22	Omentum	Muscle	Smooth muscle
7056	215000	Hs.198128	H73241	5.83	0.00	562927.40	1.00	0.00	2	183.63	Peripheral ner	Brain	Germ Cell
7059	202189	Hs.172784	H52391	61.43	10.03	6.11	2.00	0.00			Uterus	LID not found	Other
7063	342108	Hs.301122	N80326	24.22	1.28	18.92	3.00	1.00	12	246.56	Blood	Uterus	Tonsil
7065	178950	Hs.75098	N48153	10.82	0.58	18.78	1.00	0.00	7	698.14	Heart	Parathyroid	Ovary
7070	488881	Hs.184336	AA121504	13.14	0.35	23.80	7.00	5.00			Placenta	Foreskin	Prostate
7075	143145	Hs.34462	R73681	161.71	14.75	10.96	3.00	1.00			Umbilical cord	Thyroid	Stomach
7078	502287	Hs.83992	AA186781	40.46	3.79	10.69	4.00	4.00	1	111.21	Pancreas	Heart	LID not found
7081	320456	Hs.48905	N04706	7.18	1.00	7.18	0.00	2.00	3	43.98	Uterus	Uterus	Foreskin
7083	267293	Hs.192674	N24609	144.18	5.41	26.67	3.00	1.00	20	272.37	Prostate	Lung	Testis
7090	245174	Hs.172789	N54456	53.28	10.20	5.22	1.00	0.00	7	133.06	Parathyroid	Pool	Pool
7093	347613	Hs.55762	N61504	12.41	0.00	1241308.51	13.00	0.00	13	84.05	Peripheral ner	CNS	Foreskin
7094	488276	Hs.2820	AA059759	8.44	1.81	5.23	1.00	0.00	14	347.76	Uterus	Placenta	Pool
7095	345056	Hs.103177	N72759	15.11	1.68	9.00	1.00	0.00	18	175.55	CNS	Parathyroid	Foreskin
7096	460114	Hs.104252	AA676840	6.39	0.11	58.31	3.00	0.00	13	101.09	Tonsil	Lymph	Breast
7101	323084	Hs.185854	N42874	92.47	13.84	5.21	1.00	0.00	8	70.47	Skin	Adipose	Nose
7108	769712	Hs.153227	AA428559	10.84	1.00	10.64	3.00	2.00	3	23.62	Stomach	Placenta	Foreskin
7107	884355	Hs.62318	AA629542	32.55	4.06	8.02	1.00	0.00	19	240.94	Breast	Whole embryo	Brain
7109	87625	Hs.9013	T49530	7.62	0.73	10.47	3.00	1.00			Peripheral ner	Cervix	Umbilical cord
7109	292894	Hs.82426	N63733	12.49	0.00	1248926.47	14.00	0.00	1	74.61	Peripheral ner	Esophagus	Eye
7115	193736	Hs.34012	N48122	61.06	9.81	6.23	1.00	0.00	1		Prostate	Lung	LID not found
7121	855487	Hs.75811	AA664155	42.60	2.77	15.40	3.00	0.00	12	443.75	Germ Cell	Tonsil	Brain
7125	854874	Hs.154332	AA630348	8.69	1.00	6.66	1.00	0.00	14	123.62	Whole embryo	Codon	Lung
7131	740801	Hs.78950	AA677288	71.09	10.25	8.84	3.00	0.00	11	239.66	Blood	Muscle	Thyroid
7132	88638	Hs.8081	T49802	15.29	1.05	14.58	4.00	1.00	8	89.13	Placenta	Pool	CNS
7135	50882	Hs.181406	H18427	62.99	1.00	62.99	4.00	2.00	11	205.99	Liver	Gall bladder	Prostate
7136	78822	Hs.11389	T84004	10.20	1.13	9.07	2.00	0.00	6	118.59	Adrenal gland	Pooled	Adrenal gland
7138	264895	Hs.5148	N21170	9.57	0.38	25.09	7.00	5.00	2	681.48	CNS	Adrenal gland	Pooled
7147	797048	Hs.68879	AA483225	39.84	5.56	7.17	3.00	0.00	7	511.27	Peripheral ner	Brain	Aorta
7148	70152	Hs.108740	T50041	44.82	7.99	5.02	0.00	2.00	19	247.58	Placenta	Pool	Placenta
7150	32241	Hs.55075	N43334	13.93	1.68	8.45	1.00	0.00	3	67.59	Umbilical cord	Liver	Adrenal gland
7153	148688	Hs.89449	R80779	5.70	0.10	57.00	6.00	3.00	6	118.59	Adrenal gland	Pooled	Adrenal gland
7155	41208	Hs.1274	R56774	34.28	6.44	5.32	1.00	0.00	2	681.48	CNS	Adrenal gland	Pooled
7156	70203	Hs.9094	T50063	6.85	0.00	684569.50	1.00	0.00	7	511.27	Peripheral ner	Brain	Aorta
7160	83920	Hs.18910	T84312	9.15	1.11	8.25	1.00	0.00	19	247.58	Placenta	Pool	Placenta
7161	285460	Hs.167746	N88396	9.34	0.95	9.61	1.00	0.00	3	67.59	Umbilical cord	Liver	Adrenal gland
7163	23517	Hs.78885	R17783	17.97	0.19	92.84	1.00	0.00	6	118.59	Adrenal gland	Pooled	Adrenal gland
7165	450453	Hs.168910	AA632815	5.13	0.00	513271.43	1.00	0.00	2	681.48	CNS	Adrenal gland	Pooled
7167	61070	Hs.7689	H17115	8.52	0.39	18.55	1.00	0.00	7	511.27	Peripheral ner	Brain	Aorta
7168	81578	Hs.181300	T85844	46.80	3.05	15.36	4.00	0.00	19	247.58	Placenta	Pool	Placenta
7169	259591	Hs.172809	N32765	10.35	2.02	5.13	1.00	0.00	3	67.59	Umbilical cord	Liver	Adrenal gland
7170	253013	Hs.198800	N99318	282.51	7.23	36.33	17.00	4.00	3	67.59	Umbilical cord	Liver	Adrenal gland
7171	789764	Hs.57690	AA449992	24.53	4.35	5.64	2.00	1.00	22	51.87	Whole embryo	Eye	Pool

Table 3A

7174	133118	Hs.100565	R26143	7.83	1.00	7.83	2.00	2.00	17	-14.27 Pooled	Adrenal gland	Aorta
7175	773282	Hs.87502	A425297	7.84	1.00	7.84	2.00	2.00	15	244.61 Tonsil	Blood	Whole embryo
7179	756533	Hs.74631	A443640	91.80	10.09	9.10	2.00	2.00	19	-8.29 Bone marrow	Omentum	Nose
7185	204898	Hs.160316	H57138	13.73	0.12	133.96	11.00	6.00		31.43 CNS	Muscle	Breast
7189	415191	Hs.78854	W95116	13.27	2.31	5.74	2.00	2.00	2	212.78 Bone marrow	Eye	Blood
7195	869466	Hs.89335	A4680249	5.96	0.00	598381.12	1.00	0.00	20	50.78 Tonsil	Eye	Colon
7198	223128	Hs.110298	H55962	65.54	0.08	1243.01	9.00	6.00	18	442.83 Tonsil	Parathyroid	Bone
7199	731070	Hs.53601	A4421286	13.90	1.00	13.90	2.00	2.00	12	51.33 Synovial mem	Bone	Blood
7202	854548	Hs.174131	A4623808	2021.66	305.32	6.62	2.00	0.00		3.94 Liver	Head and nec	Forebrain
7203	837808	Hs.193328	A4434060	47.08	6.93	8.79	1.00	0.00	14	61.38 Eye	Colon	Brain
7204	894630	Hs.17144	AA171606	211.74	17.49	12.10	6.00	4.00	1	135.33 CNS	Brain	Forebrain
7207	591055	Hs.18842	AA161087	12.20	0.17	72.03	9.00	5.00	14	175.36 Brain	Lymph	Skin
7210	481781	Hs.154730	AA682390	18.33	1.31	12.46	4.00	0.00	20	431.85 Brain	LID not found	Other
7212	509841	Hs.177409	AA052959	158.16	24.78	6.38	3.00	0.00	10	25.07 Breast	Testis	LID not found
7214	843234	Hs.80458	AA468447	78.79	9.70	8.12	1.00	0.00	7	488.51 Small intestine	Pancreas	Muscle
7217	50914	Hs.23408	H18105	17.52	0.00	1751753.02	14.00	0.00	12	25.07 Breast	Pool	Forebrain
7228	882510	Hs.181043	AA678460	384.77	23.61	14.26	5.00	0.00	13	134.82 Blood	Forebrain	Brain
7232	40036	Hs.165888	R33442	77.36	8.16	9.48	2.00	0.00	15	218.34 Aorta	Brain	Eye
7238	48950	Hs.9848	H10335	74.84	14.59	8.11	1.00	0.00	5	283.38 Aorta	Kidney	Germ Cell
7241	46811	Hs.23540	H10009	8.74	0.00	873640.24	12.00	0.00	5	591.55 Thyroid	Brain	Germ Cell
7242	594120	Hs.57655	AA169469	23.32	1.34	17.39	2.00	0.00	10	245.32 Umbilical cord	Small intestine	Adrenal gland
7243	251201	Hs.13879	H96857	18.83	3.72	5.06	1.00	0.00	5	560.59 Eye	Synovial mem	Kidney
7247	279377	Hs.48351	N48899	41.02	7.86	5.22	1.00	0.00	11	262.66 -	Pleocilia	Kidney
7251	46378	Hs.106528	H93087	58.08	7.08	8.23	2.00	0.00	22	139.83 CNS	Parathyroid	Heart
7252	4376	Hs.41716	W46577	70.03	2.58	27.16	16.00	4.00	20	74.7 Ear	Pleocilia	Parathyroid
7254	324122	Hs.23648	H17520	11.38	0.00	1135891.44	3.00	0.00	22	126.99 Ignore	Larynx	Synovial membrane
7257	50722	Hs.18205	T32398	699.44	18.43	37.84	4.00	4.00	3	146.6 Stomach	Skin	Testis
7258	88605	Hs.6526	H24317	20.56	3.91	5.26	1.00	0.00	20	270.81 Adipose	Uterus	Colon
7260	51931	Hs.78771	AA398187	987.80	84.21	15.39	7.00	0.00	16	423.84 Blood	Germ Cell	Aorta
7274	949339	Hs.5260	N59534	5.73	1.00	5.73	2.00	0.00	8	463.92 Forebrain	Blood	CNS
7278	85523	Hs.172153	AA684160	30.62	2.02	15.15	0.00	3.00	3	726.84 Brain	LID not found	Other
7294	324715	Hs.352	W47362	6.80	1.29	5.29	1.00	0.00	6	172.31 Nose	Spleen	Placenta
7298	122183	Hs.181280	T88628	12.26	0.76	18.07	4.00	4.00	7	586.57 Heart	LID not found	Other
7304	386484	Hs.109360	AA028413	7.90	1.04	7.60	1.00	0.00	15	20.39 Brain	LID not found	Other
7306	430264	Hs.18441	AA010557	15.95	1.41	11.33	3.00	0.00	10	185.42 Nose	Whole embryo	Cervix
7308	810225	Hs.44582	AA64702	37.85	7.42	5.10	1.00	0.00	21	149.7 Pooled	Kidney	Brain
7314	415250	Hs.155667	W61885	51.41	8.47	8.07	2.00	3.00	15	169.81 Eye	Pool	Forebrain
7315	323603	Hs.31702	W44340	13.71	2.66	5.15	1.00	0.00	2	75.03 CNS	LID not found	Other
7322	80609	Hs.18480	AA458488	19.20	2.19	8.78	2.00	1.00	2	97.87 Nose	Forebrain	Ovary
7327	502684	Hs.35861	AA127089	43.44	2.26	19.18	11.00	1.00	2	Adrenal gland	Germ Cell	Pancreas
7330	502155	Hs.199001	AA126878	28.62	1.90	15.86	5.00	4.00				
7332	271280	Hs.107854	N34637	211.90	31.16	6.80	2.00	0.00				
7335	418279	Hs.35962	W60323	30.51	3.50	8.72	2.00	0.00				
7338	234121	Hs.184181	H70603	24.14	1.41	17.12	6.00	6.00				
7339	281162	Hs.31714	N50982	7.04	0.06	120.34	8.00	4.00				
7358	271890	Hs.44890	H31776	427.45	19.08	835.66	2.00	0.00				
7363	178856	Hs.31776	H49517	5.77	0.01	22.40	3.00	1.00				
7366	810727	Hs.21103	AA457718	9.53	1.54	6.20	0.00	2.00				
7367	201217	Hs.202894	R99293	98.79	6.30	15.69	3.00	1.00				
7371	178850	Hs.31787	H49519	46.16	2.86	16.14	8.00	2.00				
7383	201855	Hs.205539	H48251	107.45	2.01	53.47	8.00	5.00				
7390	782812	Hs.181315	AA448231	10.80	0.35	30.77	9.00	6.00				
7391	503155	Hs.35250	AA148945	14.48	2.88	5.03	1.00	0.00				
7392	203335	Hs.47253	N51441	6.03	0.85	10.13	2.00	3.00				
7394	271441	Hs.03573	N34789	47.74	2.16	22.11	1.00	1.00				
7400	324618	Hs.3273	W47015	35.24	3.97	8.87	1.00	0.00				

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7401 416262	Hs.118571	W90740	126.24	1.82	78.16	21.00	6.00	14	Thyroid	Colon	Pool	Brain
7407 487013	Hs.155182	A4043065	6.22	0.67	9.32	7.00	6.00	17	202.37	Synovial mem	Eye	Adrenal gland
7408 878413	Hs.184877	A4870357	48.20	6.13	7.87	1.00	0.00	6	39.81	Larynx	Gall bladder	Lung
7416 855347	Hs.161386	AA064195	65.02	2.76	23.41	1.00	0.00	1	118.49	Small intestine	Thymus	CNS
7420 362926	Hs.87773	AA018980	11.78	1.61	7.32	1.00	0.00	6	236.77	Ear	Tonsil	Thymus
7423 245277	Hs.17109	N53447	82.58	1.00	92.58	20.00	6.00	X	245.06	Peripheral ner	Bone	Thymus
7424 833906	Hs.181244	AA644657	1780.45	197.80	9.05	2.00	3.00	17	114.63	Epididymis	Adrenal gland	Thymus
7427 376475	Hs.74278	A4041396	104.18	18.92	6.16	1.00	0.00	17	53.69	Lung	Placenta	Ovary
7428 284001	Hs.2481	N53380	17.25	2.18	7.99	1.00	0.00	14	54.65	Ear	Bone	Bone
7432 857264	Hs.14732	AA069869	17.25	2.58	6.70	4.00	0.00	6	368.74	Brain	Foreskin	Colon
7434 359285	Hs.93764	AA019234	36.48	1.75	20.63	21.00	2.00	1	639.73	Foreskin	Heart	Kidney
7436 845477	Hs.196394	AA644211	59.18	1.00	59.18	22.00	8.00	1	34.88	Umbilical cord	Aorta	Bone
7437 809806	Hs.173887	AA454753	117.11	10.07	11.63	3.00	1.00	19	144.01	Heart	Cervix	LID not found
7442 199367	Hs.21853	R56691	341.19	1.84	208.40	22.00	5.00	6	410.73	Bone	Pool	LID not found
7448 345232	Hs.36	W72329	6.61	1.00	6.61	1.00	2.00	3	18.88	Smooth musc	Nose	CNS
7453 264146	Hs.58645	N20533	15.41	1.49	10.36	2.00	0.00	3	510.8	Foreskin	Aorta	Gall bladder
7458 288122	Hs.173859	N69049	18.70	3.69	6.21	1.00	0.00	3	185.45	Foreskin	Heart	Pool
7461 291348	Hs.201673	N72239	67.41	8.39	8.03	2.00	0.00	10	205.56	CNS	Adiposa	Heart
7466 272990	Hs.139534	N36123	65.27	8.28	7.88	2.00	0.00	16	123.72	Small intestine	Head and nec	Esophagus
7467 268176	Hs.1580	N30156	7.92	0.88	8.10	2.00	0.00	11	195.84	Pancreas	Pooled	Eye
7468 261522	Hs.203881	H08742	15.10	1.75	8.62	0.00	2.00	18	448.74	Tonsil	Whole embryo	LID not found
7475 282267	Hs.144477	N51944	7.07	0.54	13.06	1.00	3.00	1	592.98	Neural	Bone	Esophagus
7480 855910	Hs.621	AA630326	43.72	1.00	43.72	9.00	6.00	10	32.49	Eye	Skin	Uterus
7482 264355	Hs.93823	N52136	5.42	0.56	9.70	2.00	1.00	14	260.52	Eye	Brain	LID not found
7483 362059	Hs.83450	AA001432	9.69	0.71	13.60	2.00	0.00	7	624.82	Brain	LID not found	Other
7489 773373	Hs.157174	AA425722	9.69	1.50	7.63	2.00	0.00	X	351.05	Aorta	Tonsil	Lung
7492 22355	Hs.13251	T88094	342.67	0.59	576.63	23.00	5.00	8	278.6	Brain	LID not found	Other
7493 510351	Hs.76526	AA055585	37.95	1.63	23.28	6.00	4.00	X	104.75	Ear	Thyroid	Whole embryo
7495 51344	Hs.169590	H21040	11.47	0.00	1147043.95	2.00	1.00	12	481.87	Brain	Pool	LID not found
7496 46051	Hs.21447	H08084	11.43	1.86	6.91	1.00	1.00	22	127.67	Eye	Brain	Germ Cell
7498 49331	Hs.169279	H15445	13.20	1.00	6.91	1.00	1.00	13	78.13	Pooled	Placenta	Pool
7499 757350	Hs.193370	AA437106	5.08	0.00	508077.70	3.00	0.00	11	248.27	Brain	LID not found	Other
7500 50847	Hs.13252	H17929	10.39	1.33	7.80	1.00	0.00	6	116.42	Adrenal gland	Lymph	Cervix
7502 786197	Hs.169470	AA461118	24.55	2.03	12.11	3.00	1.00	6	308.15	Brain	LID not found	Other
7503 31625	Hs.6486	R41754	12.58	0.00	1258285.10	10.00	1.00	8	307.07	Adrenal gland	Kidney	Tonsil
7505 51221	Hs.106635	H19246	12.37	0.21	59.55	14.00	4.00	22	-12.22	Head and nec	Pancreas	Breast
7507 67221	Hs.138671	T52874	5.86	0.54	10.84	2.00	0.00	16	48.85	Pooled	Blood	Adrenal gland
7516 254010	Hs.61641	N22140	19.27	2.73	7.06	5.00	0.00	1	608.06	Prostate	Uterus	Aorta
7520 52932	Hs.106554	R15443	10.72	0.19	56.17	8.00	4.00	17	537.95	Adipose	Germ Cell	Foreskin
7523 773479	Hs.179681	AA427899	300.30	4.19	72.32	10.00	0.00	8	436.63	Synovial mem	Adrenal gland	Pancreas
7524 25162	Hs.13261	R38898	5.20	0.03	163.70	2.00	0.00	1	608.06	Prostate	Uterus	Aorta
7529 40932	Hs.107287	R55783	10.10	1.00	10.10	2.00	1.00	1	537.95	Adipose	Germ Cell	Foreskin
7529 897107	Hs.111024	AA676877	41.94	1.00	41.94	9.00	6.00	8	436.63	Synovial mem	Adrenal gland	Pancreas
7530 51628	Hs.18136	H22044	40.58	6.78	7.02	1.00	0.00	16	48.85	Pooled	Blood	Adrenal gland
7531 797025	Hs.100071	AA463517	19.78	0.00	1977664.64	4.00	0.00	1	608.06	Prostate	Uterus	Aorta
7534 742116	Hs.83468	AA403800	22.28	3.36	6.82	1.00	0.00	17	537.95	Adipose	Germ Cell	Foreskin
7536 32786	Hs.21608	R43550	18.13	2.43	7.46	2.00	0.00	8	436.63	Synovial mem	Adrenal gland	Pancreas
7539 40303	Hs.81672	R52981	14.27	0.98	14.82	1.00	0.00	2	541.9	Pool	Placenta	Parathyroid
7545 856902	Hs.157236	AA669603	55.25	0.55	100.45	9.00	6.00	10	499.34	Ear	Placenta	CNS
7546 855890	Hs.208787	AA630320	18.99	0.24	78.43	9.00	6.00	12	217.06	Pooled	Whole embryo	Ovary
7547 81203	Hs.107868	T57069	13.34	2.04	6.54	3.00	0.00	10	217.06	Pooled	Whole embryo	Ovary
7549 435076	Hs.77204	AA701455	34.09	2.94	11.60	2.00	0.00	16	193.03	Lymph	Brain	LID not found
7550 343987	Hs.44926	W70234	56.05	2.58	21.89	14.00	5.00	2	541.9	Pool	Placenta	Parathyroid
7551 69935	Hs.6568	T48632	18.11	3.52	5.14	1.00	0.00	10	499.34	Ear	Placenta	CNS
7552 51228	Hs.143434	H15315	26.25	0.49	54.08	9.00	0.00	12	217.06	Pooled	Whole embryo	Ovary
7554 41648	Hs.25654	R52798	18.22	1.00	18.22	11.00	5.00	10	217.06	Pooled	Whole embryo	Ovary
7555 34010	Hs.203231	R44647	41.18	7.24	5.69	1.00	0.00	16	193.03	Lymph	Brain	LID not found

Table 3A

7562	365883	Hs.182423	AA025421	50.39	7.51	6.71	0.00	1.00	21	241.69	Gall bladder	Liver	Stomach
7563	75039	Hs.184106	T5370	553.19	40.55	13.64	3.00	0.00	13	62.3	Neural	Parathyroid	Blood
7565	291037	Hs.4854	N72115	19.84	2.19	8.86	5.00	0.00			Fore skin	Germ Cell	Uterus
7579	773106	Hs.22142	AA425316	16.83	1.00	18.63	3.00	1.00	11	37.97	Skin	Pooled	Germ Cell
7584	80281	Hs.171914	T64437	19.01	2.50	6.55	2.00	0.00	3	52.58	Uterus	Brain	Parathyroid
7585	744374	Hs.4968	AA021188	28.21	4.52	6.25	2.00	0.00	17	401.89	Nose	Aorta	Parathyroid
7586	477350	Hs.3830	AA045518	26.74	1.85	14.44	5.00	0.00			Ear	Testis	Brain
7588	994164	Hs.8947	AA165325	13.66	2.28	6.08	1.00	0.00			Uterus	.	Bone
7589	72441	Hs.81066	T51617	14.17	0.14	99.27	9.00	6.00	6	623.15	Adrenal gland	Colon	Germ Cell
7591	377048	Hs.109605	AA057796	121.75	8.68	14.03	9.00	0.00			Brain	LID not found	Other
7592	51828	Hs.106817	H22946	152.48	26.03	5.86	2.00	0.00	12	289.25	Placenta	Heart	Prostate
7593	67655	Hs.50588	T46655	15.54	2.03	7.64	1.00	0.00	3	-1.51	Pooled	Brain	LID not found
7594	257773	Hs.109050	N08151	5.33	0.14	39.49	1.00	0.00	3	324.53	Smooth muscle	Ear	Bone
7597	761046	Hs.6117	AA446451	101.93	10.16	10.03	1.00	0.00	5	500.87	Stomach	Adipose	Gall bladder
7598	897650	Hs.23723	AA489784	17.16	3.33	5.15	1.00	0.00	12		Brain	LID not found	Other
7600	49593	Hs.106818	H28738	15.04	1.26	11.98	1.00	0.00	2	356.03	Ovary	Blood	Pooled
7603	27905	Hs.158623	N51705	48.41	2.28	20.36	9.00	5.00	15	145.57	Fore skin	Gall bladder	.
7604	291185	Hs.7037	N87702	53.91	6.44	6.37	6.00	0.00	1	535.74	Neural	Muscle	Placenta
7613	773885	Hs.129828	AA433920	21.62	3.18	8.80	4.00	1.00	9	118.98			
7614	37283	Hs.203309	R43471	28.73	5.48	5.24	1.00	0.00	1		Nose	Adipose	Thyroid
7615	589278	Hs.29365	AA147320	58.81	11.16	5.00	1.00	0.00	18	241.69	Liver	Pool	Placenta
7617	83740	Hs.51483	T60326	5.97	0.64	9.31	8.00	4.00	12		Bone	Ear	Fore skin
7626	251828	Hs.15984	H66554	348.07	44.25	7.87	1.00	0.00			Ear	Muscle	Whole embryo
7627	609155	Hs.109528	AA175867	15.19	1.50	10.11	1.00	1.00	12	226.22	Head and neck	Skin	Placenta
7632	841415	Hs.10706	AA487557	354.36	12.92	27.43	18.00	1.00			Blood	Brain	Whole embryo
7638	394759	Hs.7307	AA172096	19.40	3.01	6.45	1.00	0.00	17	101.54	Neural	Fore skin	Thyroid
7643	505579	Hs.108581	AA147058	35.92	2.34	15.33	2.00	0.00	6	104.03	Placenta	Colon	Breast
7648	75892	Hs.107216	T59431	10.24	1.80	5.39	1.00	0.00	12	215.9	Brain	Breast	Liver
7650	84264	Hs.9870	T72650	40.88	6.47	6.31	0.00	1.00	14	128.98	CNS	Lymph	Whole embryo
7658	23364	Hs.101058	R39234	7.27	0.55	13.15	7.00	5.00	16	185.45	Gall bladder	Fore skin	Parathyroid
7665	32737	Hs.187388	R43093	8.80	1.12	8.73	2.00	0.00	16	358.09	Smooth muscle	Liver	Gall bladder
7666	795831	Hs.204161	AA461508	7.98	0.33	23.36	9.00	5.00	2	741.81	Prostate	Blood	Pancreas
7667	897313	Hs.101391	AA460297	16.36	2.24	7.29	1.00	0.00	1	714.04	Kidney	Prostate	Uterus
7669	33603	Hs.203881	R43873	18.34	2.73	6.71	0.00	1.00	2	231.53	Pooled	Uterus	Parathyroid
7671	82215	Hs.76888	T88878	7.21	0.88	7.38	1.00	0.00	19	271.02			
7679	750405	Hs.42474	AA470081	13.01	0.89	14.56	4.00	3.00	7	95.03	Fore skin	LID not found	Other
7680	40178	Hs.153489	R53576	35.88	4.20	8.54	12.00	0.00	14	18.43	Ear	CNS	Pooled
7682	248649	Hs.104597	H80749	18.85	2.13	9.36	0.00	1.00	X	351.03	Fore skin	Pancreas	Whole embryo
7684	488115	Hs.167842	AA054704	22.85	4.28	5.27	1.00	0.00	2	224.29	Cervix	Bone	Aorta
7689	505274	Hs.24587	AA142880	40.48	6.72	7.08	5.00	1.00	6	101.59	Stomach	Placenta	Uterus
7700	261687	Hs.40290	H98760	324.08	62.34	5.20	1.00	0.00	3	525.98	Small intestine	Gall bladder	Bone
7708	262334	Hs.40336	H99394	220.58	19.94	11.06	2.00	0.00	14		Blood	Fore skin	Pancreas
7715	795730	Hs.24587	AA460282	9.82	0.55	17.85	4.00	5.00	11	260.52	Adipose	CNS	Pooled
7720	289787	Hs.42823	N27145	6.78	0.71	8.55	1.00	0.00	12	253.29	Aorta	Colon	Brain
7724	220078	Hs.200359	H82527	9.30	0.00	93.0162.72	2.00	0.00	2	358.2	Fore skin	LID not found	Other
7728	255853	Hs.42827	N20989	27.71	1.52	18.26	7.00	1.00	3	354.17	Esophagus	Stomach	Lung
7736	273075	Hs.107854	N38421	22.11	0.15	145.43	5.00	0.00					
7739	237329	Hs.24997	N29639	6.03	1.00	8.03	3.00	0.00	14				
7743	490985	Hs.198400	AA136707	141.38	5.13	27.58	13.00	3.00	6				
7744	255005	Hs.15298	N21081	9.52	0.49	19.32	7.00	5.00	3				
7764	347670	Hs.14333	V61472	14.91	1.03	14.42	2.00	0.00	14				
7765	809416	Hs.25021	AA459888	31.27	6.46	5.72	0.00	2.00	11				
7762	128862	Hs.14337	R17098	8.39	0.25	33.84	7.00	6.00	12				
7771	291059	Hs.188915	N72116	135.89	23.19	5.86	1.00	0.00	2				
7776	292085	Hs.42807	N73316	13.14	1.22	10.81	2.00	0.00	2				
7777	415864	Hs.49843	V680715	23.28	0.96	35.23	7.00	1.00	3				
7779	301309	Hs.17348	N80834	51.53	8.44	9.46	1.00	0.00					

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7781	324690	Hs.40038	V47325	119.95	0.95	126.25	23.00	6.00	15	65.19	Stomach	Bone	Foreskin
7783	199534	Hs.103189	R59913	10.48	1.54	6.81	1.00	2.00			Pooled	Colon	Aorta
7785	428978	Hs.48962	AA005145	8.29	0.00	828515.45	2.00	0.00			LID not found	LID not found	Other
7789	322923	Hs.55878	V45031	9.43	0.13	72.93	1.00	0.00			Eye	Pool	Other
7795	190891	Hs.101831	H38110	5.04	1.00	5.04	2.00	3.00			Whole embryo	LID not found	LID not found
7796	758355	Hs.100264	AA404260	6.86	1.17	5.87	1.00	0.00			Eye	Pool	Pool
7808	505183	Hs.59033	AA115111	112.19	8.69	12.91	2.00	0.00			Uterus	Head and new spleen	
7808	491403	Hs.204298	AA150418	9.24	1.70	5.44	1.00	1.00			427.18 Liver		
7808	795186	Hs.104170	AA453468	29.39	5.50	5.05	1.00	0.00			368.33 CNS	Cervix	
7811	491375	Hs.134107	AA115533	7.20	0.55	13.10	5.00	4.00			207.62 Breast	Uterus	Heart
7817	289229	Hs.185767	N73680	6.57	0.98	8.71	1.00	0.00			226.12 CNS	Foreskin	Pancreas
7819	364865	Hs.153688	AQ38746	5.14	1.00	5.14	0.00	2.00			478.39 Germ Cell	Breast	Heart
7820	247462	Hs.114437	N54157	17.34	2.76	6.29	2.00	0.00			108.17 Pool	LID not found	Other
7826	340549	Hs.6634	V68718	5.55	0.76	7.10	1.00	0.00			189.9		
7831	415876	Hs.121563	V68281	6.08	1.21	5.05	1.00	0.00			Prostate	Kidney	Tonsil
7834	428223	Hs.189509	AA001749	67.82	8.74	7.78	2.00	0.00			191.03 Peripheral nervous system	Cervix	Tonsil
7837	323550	Hs.195976	V46415	34.83	5.36	6.47	1.00	1.00			Shin	Ovary	Stomach
7842	192227	Hs.111219	R11047	27.31	4.81	6.92	1.00	0.00			592.45 Tonsil	Kidney	Pool
7843	196576	Hs.107445	R01680	90.78	15.83	6.74	1.00	0.00			Kidney	Pool	LID not found
7847	417867	Hs.140823	V680128	62.61	10.25	6.11	0.00	1.00			77.53 Smooth muscle	Nose	
7848	853749	Hs.83848	AA053983	687.70	130.83	5.10	1.00	0.00			43.85 Synovial mem	Small intestine	
7855	417506	Hs.103238	V60520	6.85	1.00	6.85	1.00	0.00			Ovary	Testis	Tonsil
7856	868212	Hs.118787	AA033901	469.98	1.00	469.98	8.00	6.00			512.88 Head and nec	Synovial mem	Larynx
7859	502595	Hs.4055	AA156346	44.32	8.34	5.31	1.00	0.00			30.95 Small intestine	Larynx	Nose
7862	770860	Hs.194110	AA434388	280.85	0.17	1637.06	9.00	6.00			367.22	Uterus	Pool
7863	357138	Hs.137383	V65323	7.98	0.90	8.83	8.00	6.00			Cervix	Stomach	Adrenal gland
7864	844641	Hs.649604	AA678904	5.58	0.08	73.78	8.00	6.00			Adrenal gland	Gall bladder	Colon
7867	212115	Hs.154038	AA014441	47.77	5.63	8.48	1.00	0.00			726.84 Esophagus	Spleen	Prostate
7878	877832	Hs.178966	AA488175	47.77	5.63	8.48	1.00	0.00			682.34 Tonsil	Breast	Germ Cell
7879	72496	Hs.181359	AA022688	6.64	1.26	5.29	1.00	0.00			26.79 Pooled	Ploenta	Blood
7884	72498	Hs.9344	T51838	12.04	0.54	22.40	3.00	0.00			117.06 Nose	Head and nec	Breast
7886	856427	Hs.6566	AA030784	47.33	1.00	47.33	9.00	6.00			118.59 Liver	Gall bladder	
7889	308391	Hs.23272	N94428	5.85	1.00	5.95	4.00	4.00			Spleen	Muscle	Adrenal gland
7894	869233	Hs.165766	T61660	28.61	4.30	5.86	3.00	0.00			-3.15 Cervix	Tonsil	Whole embryo
7899	755923	Hs.8700	AA678854	55.00	1.00	55.00	9.00	2.00			117.68 Ignore	Synovial mem	Germ Cell
7900	72016	Hs.3569	T51895	5.01	0.42	11.96	7.00	4.00			180.08 Spleen	Ploenta	LID not found
7902	131268	Hs.83070	R24266	41.25	6.32	6.52	2.00	2.00			42.54 Adipose	Bone	Spleen
7903	731358	Hs.140452	AA418787	209.90	2.78	75.64	2.00	2.00			250.07 Pooled	Thyroid	Spleen
7905	45284	Hs.169733	H08916	12.90	1.27	9.84	2.00	1.00			36.48	Blood	Kidney
7906	742862	Hs.50888	AA405180	8.00	1.00	9.00	0.00	3.00			544.45 Pooled	Kidney	Testis
7911	50704	Hs.22773	H17413	12.33	0.00	272.87	3.00	0.00			33.48 Adipose	Muscle	Thyroid
7913	471641	Hs.11958	AA034945	12.69	0.05	33.82	9.00	6.00			421.53 Cervix	Tonsil	Heart
7914	852829	Hs.3866	AA569178	13.13	0.39	11.08	6.00	6.00			142.71 Umbilical cord	Parathyroid	Uterus
7916	32517	Hs.189476	R43271	6.35	0.57	11.08	0.00	1.00			278.4 Brain	Germ Cell	
7917	342720	Hs.78025	V68356	18.19	3.38	5.38	0.00	1.00			232.07 Liver	Uterus	Cervix
7920	83508	Hs.11855	T69563	7.23	0.41	17.43	1.00	0.00			155.56 Adrenal gland	Eye	
7921	344139	Hs.15432	V68790	69.10	1.00	89.10	12.00	5.00			193.03	142.71 Umbilical cord	Parathyroid
7925	769751	Hs.194784	AA428539	12.35	1.88	6.57	2.00	0.00			111.26 Parathyroid	Liver	Testis
7928	22883	Hs.150928	R38619	5.72	0.08	72.03	1.00	0.00			357.92 Aorta	Uterus	Pool
7929	744052	Hs.100221	AA628265	9.49	0.97	9.76	5.00	1.00			370.61 Cervix	Spleen	Pancreas
7931	208735	Hs.1259	R88050	8.42	0.56	15.05	1.00	0.00			187.95 Muscle	Pancreas	Tonsil
7933	489662	Hs.161791	AA059372	13.21	1.00	13.21	2.00	2.00			283.8 Marrow	Stomach	Skin
											47.53 Liver	Pooled	Pool
											319.18 Cervix	Tonsil	Stomach

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8132	491164	Hs 44482	AA137072	55.33	5.36	10.29	0.00	1.00	18	34.68		
8139	344975	Hs 179773	VY3010	104.50	15.71	6.65	2.00	1.00	5	126.65		Spleen
8143	202814	Hs 5476	H53602	8.82	1.74	5.05	2.00	1.00	5	389.79	Gall bladder	Cervix
8146	430319	Hs 18769	AA010617	8.70	0.59	14.74	6.00	0.00	2		Pool	LID not found
8147	762669	Hs 32241	AA047583	10.90	0.99	10.98	1.00	2.00	2	130.74	Adrenal gland	Uterus
8150	503591	Hs 127758	AA131239	14.49	1.00	14.49	2.00	6.00	12	49.36	CNS	Kidney
8151	303093	Hs 36330	N90779	8.58	1.00	8.58	3.00	1.00	3	597.76	CNS	Pool
8152	298874	Hs 47363	N63195	32.50	3.95	8.20	3.00	0.00	8		LID not found	Other
8154	209199	Hs 142722	H53959	56.77	1.80	32.65	9.00	6.00	1	474.75	Pool	LID not found
8155	762701	Hs 32244	AA447610	25.21	0.74	34.05	14.00	6.00	1	152.76	CNS	Breast
8162	271134	Hs 93436	N40817	5.64	1.00	5.64	1.00	1.00	5		Blood	Adrenal gland
8163	206609	Hs 26923	N70848	82.67	13.09	6.32	2.00	0.00	6	626.75		Pool
8164	415828	Hs 75874	N64789	87.92	0.56	157.54	23.00	5.00	21	217.43	Placenta	Ignore
8168	471642	Hs 75279	AA046339	41.65	1.36	21.09	6.00	4.00	6	524.72	Gall bladder	Cervix
8169	426528	Hs 58974	AA004842	15.00	2.10	7.16	2.00	0.00	19		Gall bladder	Aorta
8172	375680	Hs 189680	V51685	7.29	0.08	118.31	5.00	0.00	4	243.59		Pool
8173	487713	Hs 172028	AA043347	27.75	4.64	5.98	0.00	3.00	7		Pool	Thyroid
8177	471820	Hs 58953	N68758	5.08	1.00	5.08	1.00	2.00	4		Pool	LID not found
8178	293883	Hs 185133	N53360	69.68	15.18	5.91	2.00	0.00	7	466.22	Pool	Other
8181	491478	Hs 193719	AA150298	10.03	1.00	10.03	3.00	0.00	18		Pool	LID not found
8182	771142	Hs 98571	AA427778	140.67	16.87	8.34	2.00	0.00	19	18.26	Uterus	LID not found
8185	411850	Hs 59075	V50164	8.76	1.27	6.89	1.00	0.00	4		Gall bladder	Umbilical cord
8183	427697	Hs 59077	AA018894	30.11	5.41	6.06	2.00	0.00	7		Pool	Forebrain
8184	245885	Hs 187714	N55355	29.28	2.01	14.58	3.00	1.00	1	553.01	Colon	LID not found
8185	347035	Hs 6584	N61135	36.83	6.83	5.31	0.00	1.00	19	272.85	Gall bladder	Thyroid
8196	780947	Hs 99850	AA426651	5.58	0.27	20.80	8.00	5.00	1		Peritoneal	Germ Cell
8202	278002	Hs 182002	N63447	14.69	2.62	5.60	1.00	0.00	12		Uterus	Lung
8204	435470	Hs 37040	AA101502	31.03	2.59	11.98	5.00	1.00	17		Ear	Aorta
8205	501654	Hs 67692	AA127865	5.30	1.00	5.30	0.00	1.00	12	227.72	Colon	Cervix
8211	154436	Hs 20669	R52266	8.13	0.76	10.46	8.00	6.00	3	516.66	Stomach	Lymph node
8216	855521	Hs 65114	AA864179	113.25	5.77	19.81	0.00	1.00	3		Pool	LID not found
8217	430073	Hs 69159	AA010000	5.68	0.16	35.23	2.00	0.00	22	37.19	Forebrain	Eye
8220	381122	Hs 430	AA017378	5.73	0.22	26.07	8.00	6.00	17	309.04	Small intestine	Colon
8234	291594	Hs 210209	N67810	155.42	20.16	7.71	2.00	0.00	7	477.2	Synovial mem	Bone
8239	192196	Hs 64905	AA113469	13.32	0.13	163.22	7.00	8.00	15	309.17		Lung
8240	596796	Hs 206619	AA1144	186.31	15.25	12.21	3.00	0.00	16		Colon	Eye
8242	298134	Hs 94234	N70776	17.93	1.15	15.63	1.00	3.00	9	121.87	Synovial mem	Cervix
8248	869375	Hs 182740	AA476907	9.58	0.82	11.82	7.00	8.00	12	373.36	Colon	CNS
8250	291241	Hs 137610	N72210	35.63	3.23	11.03	2.00	0.00	15	243.31	Nose	Germ Cell
8251	810697	Hs 203304	AA457696	12.20	0.55	22.18	7.00	3.00	14	218.87	Small intestine	Gall bladder
8252	272529	Hs 154695	N35488	17.44	2.87	6.08	1.00	0.00	5	151.92	Brain	LID not found
8256	503355	Hs 154721	AA156988	50.23	6.51	7.72	7.00	0.00	5	509.48	Testis	CNS
8258	49348	Hs 75894	H15442	9.01	1.68	5.37	1.00	0.00	11	238.51	Blood	Brain
8261	362766	Hs 3138	AA018876	16.20	3.11	6.21	2.00	1.00	5	561.13	Skin	Muscle
8263	49953	Hs 206469	H29276	32.06	3.06	10.38	2.00	0.00	7		Ear	Gall bladder
8267	757268	Hs 14945	AA426087	5.03	0.00	553438.42	4.00	0.00	7	467.91	Whole embryo	CNS
8268	795729	Hs 76366	AA460281	11.31	0.55	20.57	9.00	6.00	17	306.36	Stom	Bone
8271	50582	Hs 6687	H17038	8.80	0.00	860352.58	8.00	1.00	17	28.05	Spleen	Cervix
8273	252953	Hs 20882	H65589	59.28	8.33	6.36	1.00	0.00	17	129.76	Adipose	Tonsil
8275	76221	Hs 76149	T59858	6.97	0.00	697336.82	2.00	0.00	13	146.57	Ear	Pooled
8276	24081	Hs 98279	R37588	9.23	0.00	922827.06	4.00	0.00	12	227.75	Synovial mem	Gall bladder
8282	502522	Hs 174140	AA136054	183.44	23.17	7.92	5.00	0.00	13		Whole embryo	Brain
8289	177772	Hs 150917	H45976	6.41	0.79	8.09	1.00	0.00	17		Eye	Brain
8294	878458	Hs 84183	AA670360	18.16	0.50	35.12	9.00	6.00	22	28.05	Spleen	Adrenal gland
8295	52085	Hs 107174	H23420	58.61	7.71	7.60	3.00	0.00	13	129.76	Adipose	Tonsil
8296	33914	Hs 151385	R44552	10.28	0.90	11.46	1.00	1.00	13	146.57	Ear	Pooled
8299	742565	Hs 15760	AA401345	53.69	8.84	6.07	1.00	0.00	12	227.75	Synovial mem	Gall bladder

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8302	489389	Hs.24301	A4027042	37.16	5.23	7.12	3.00	0.00	12	Breast	Adrenal gland	Adipose
8308	47432	Hs.13431	H11092	56.78	2.35	25.46	13.00	1.00	7	Stomach	Pooled	Brain
8312	33392	Hs.78340	R43863	14.14	5.88	5.88	1.00	0.00	11	Spleen	Muscle	Bone
8314	845663	Hs.101025	AA870155	32.08	5.32	6.03	3.00	0.00	18	Eye	Breast	Stomach
8316	87110	Hs.185937	T58745	14.68	0.00	1468284.75	8.00	0.00	11	Gall bladder	Thyroid	Muscle
8318	128493	Hs.87201	R10662	39.60	5.52	7.18	1.00	0.00	6	Ear	Pancreas	Thyroid
8325	87702	Hs.15959	AA658637	48.08	8.53	5.40	1.00	0.00	14	Heart	Esophagus	Gall bladder
8331	87484	Hs.8981	T48401	18.04	2.54	7.10	2.00	1.00	17	Muscle	Brain	Brain
8334	345083	Hs.835	W72250	5.60	0.95	5.92	1.00	0.00	17	Muscle	Brain	Blood
8337	80519	Hs.74515	H17528	5.58	0.21	26.03	1.00	0.00	X	Brain	LID not found	Other
8343	48289	Hs.6795	H09624	6.43	0.07	89.89	5.00	0.00	11	Esophagus	Gall bladder	Cervix
8345	769603	Hs.75139	AA425908	20.17	0.16	124.05	5.00	0.00	19	Thymus	Liver	Ear
8347	85609	Hs.74047	T62040	82.80	6.40	12.93	3.00	0.00	8	Nose	Aorta	Fore skin
8349	266318	Hs.100468	N65339	5.51	0.26	18.83	2.00	0.00	X	Brain	Whole embryo	Testis
8351	90472	Hs.99224	H16813	5.11	0.00	510866.45	4.00	0.00	X	Brain	LID not found	Other
8352	40082	Hs.27154	R52530	5.56	0.00	556275.32	6.00	0.00	X	Brain	Smooth muscle	Umbilical cord
8353	798176	Hs.111632	AA461068	88.06	12.82	6.82	2.00	0.00	7	Testis	Uterus	Cervix
8354	782521	Hs.93760	AA431782	25.81	4.63	5.58	2.00	0.00	17	Larynx	Head and neck	Nose
8355	238888	Hs.8249	H67854	300.00	12.90	23.28	7.00	1.00	6	Synovial mem	Blood	Ear
8357	70915	Hs.86392	T46979	13.07	2.08	6.34	2.00	1.00	6	Breast	Kidney	Lung
8359	772377	Hs.53447	AA404565	46.90	7.08	6.63	2.00	0.00	10	Breast	Head and neck	Adrenal gland
8360	50806	Hs.188491	H17635	19.17	1.62	11.86	5.00	0.00	11	Small intestine	Adipose	Pooled
8363	328567	Hs.24485	W40150	65.31	6.24	10.47	5.00	0.00	11	Small intestine	Adipose	Cervix
8364	79216	Hs.78549	T57765	139.29	16.33	8.53	0.00	1.00	17	Heart	LID not found	Other
8367	344988	Hs.94831	W72909	52.61	2.38	22.06	8.00	0.00	18	Heart	CNS	Ovary
8369	49475	Hs.203529	H16886	8.21	1.36	6.02	1.00	0.00	7	Ear	CNS	Ovary
8370	236777	Hs.172812	H84745	5.35	0.00	535473.28	1.00	0.00	5	Stomach	Brain	Skin
8371	510356	Hs.104925	AA102130	10.99	1.94	5.64	2.00	0.00	16	Peripheral ner	Brain	Blood
8372	742862	Hs.7785	AA401341	15.86	2.89	5.89	2.00	0.00	4	Prostate	Whole embryo	Kidney
8373	78859	Hs.87836	T61458	17.28	3.41	5.08	1.00	0.00	11	Prostate	Whole embryo	Kidney
8376	49203	Hs.107515	H15985	6.34	0.97	8.84	2.00	0.00	4	Prostate	Whole embryo	Kidney
8383	258882	Hs.44102	N28857	20.04	3.57	5.61	0.00	1.00	11	Tonsil	Parathyroid	Brain
8384	415136	Hs.131889	W63155	24.35	4.72	5.16	1.00	0.00	7	Tonsil	Parathyroid	Brain
8387	48213	Hs.110713	H08636	70.37	13.81	5.10	1.00	0.00	6	Esophagus	Gall bladder	Blood
8401	773469	Hs.5459	AA427887	77.39	8.26	8.36	1.00	0.00	1	Breast	Uterus	Cocoon
8402	628068	Hs.85951	AA311458	104.93	6.89	15.23	3.00	0.00	12	Head and neck	Cervix	Gall bladder
8403	658653	Hs.21263	AA127442	10.28	1.32	7.77	1.00	0.00	11	Brain	Testis	Lung
8409	78503	Hs.56340	T59256	31.17	0.07	465.57	6.00	1.00	3	Stomach	Brain	Eye
8410	133085	Hs.25728	R26131	7.67	0.28	27.74	7.00	6.00	6	Fore skin	Placenta	Aorta
8415	626385	Hs.173637	AA189113	99.48	10.16	9.79	9.00	0.00	1	Fore skin	Placenta	Aorta
8428	285045	Hs.8107	N20788	250.33	49.91	6.12	1.00	0.00	17	Thymus	Adipose	Ear
8429	80707	Hs.90436	T57851	28.73	4.89	5.87	1.00	0.00	11	Adipose	Cervix	Blood
8431	34294	Hs.183389	R44346	22.43	2.18	10.28	3.00	1.00	4	Fore skin	CNS	Aorta
8432	78888	Hs.109087	T61050	11.45	1.32	8.67	1.00	0.00	9	Fore skin	CNS	Aorta
8435	629908	Hs.109438	AA219100	51.41	0.00	5140558.56	17.00	6.00	11	Aorta	Smooth muscle	Smooth muscle
8438	588053	Hs.182320	AA135001	6.15	0.57	10.84	1.00	0.00	18	Gall bladder	Adrenal gland	Pooled
8440	50660	Hs.208149	H18076	40.72	4.14	9.83	5.00	0.00	10	Testis	Pool	LID not found
8442	825764	Hs.110454	AA166366	18.31	2.67	7.23	1.00	0.00	3	Testis	Pool	LID not found
8444	795250	Hs.131925	AA453991	42.44	8.26	5.14	1.00	0.00	21	Smooth muscle	Stomach	Uterus
8445	82283	Hs.8230	T41173	34.90	6.26	5.57	1.00	0.00	21	Pool	LID not found	Other
8450	427811	Hs.189920	AA001639	9.47	0.79	11.92	1.00	0.00	5	Pool	LID not found	Other
8454	415882	Hs.125039	W84716	10.49	0.00	1049002.83	5.00	0.00	5	Brain	Brain	Uterus
8459	503741	Hs.103720	AA131466	20.57	2.85	7.22	1.00	1.00	X	Eye	Brain	Stomach
8463	278905	Hs.118087	N38860	46.85	7.31	6.68	1.00	0.00	X	Fore skin	Breast	Whole embryo
8464	302661	Hs.43093	N80346	10.77	1.22	8.84	4.00	1.00	4	Placenta	Adrenal gland	CNS
8466	346861	Hs.23746	W78166	14.36	1.72	8.35	1.00	0.00	4	Heart	Kidney	Aorta
8467	301955	Hs.25248	N89738	17.29	1.00	17.29	3.00	4.00	4	Heart	Kidney	Aorta

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8468	755280	Hs.40888	AA454014	7.95	0.70	11.30	1.00	0.00	22	154.82	Eye	Heart	Testis
8474	810052	Hs.14407	AA455291	6.66	0.77	13.07	5.00	1.00			Blood	Germ Cell	Spleen
8475	260907	Hs.23275	N50827	7.19	0.55	13.07	4.00	3.00			Aorta	Brain	ForeSkin
8482	307157	Hs.203651	N83740	157.82	22.51	7.02	2.00	0.00	16	372.61	Lung	Parathyroid	LID not found
8487	140240	Hs.124134	R87886	7.37	0.75	9.81	2.00	0.00			Pooled	Parathyroid	Placenta
8490	108915	Hs.124836	T78942	14.71	0.00	147.0059.60	10.00	1.00			Pool	LID not found	Other
8498	247261	Hs.168564	N57950	46.41	8.36	7.30	2.00	0.00			Synovial mem	Breast	Umbilical cord
8499	782547	Hs.23338	AA431796	39.04	2.41	18.22	7.00	2.00	11	301.37	Whole embryo	Uterus	-
8502	237039	Hs.10162	N70059	30.23	4.64	6.52	2.00	0.00	3	491.75	Stomach	Testis	Colon
8510	782784	Hs.16786	AA448182	14.21	0.77	18.53	8.00	4.00			Tonil	Lung	Colon
8528	281558	Hs.167655	N72882	107.53	9.22	11.87	3.00	0.00			Whole embryo	Brain	Lung
8532	258242	Hs.52170	N30655	5.79	0.00	57.8813.11	1.00	0.00	3	410.63	Brain	Pool	Heart
8534	782635	Hs.170133	AA448277	39.35	1.05	37.45	4.00	5.00	10	518.95	Brain	Pool	Heart
8538	270017	Hs.13916	N24914	14.41	1.00	14.41	4.00	0.00	13	128.62	Aorta	Cell bladder	Uterus
8539	811048	Hs.103558	AA45428	10.80	0.19	55.41	9.00	6.00	12	422.22	ForeSkin	Uterus	Placenta
8545	239404	Hs.50899	N76097	9.23	0.00	92.3242.15	1.00	0.00	3	450.63	Adipose	Stomach	Heart
8550	809785	Hs.168889	AA454754	5.09	1.00	5.09	4.00	0.00			Whole embryo	Brain	Lung
8551	198607	Hs.68617	R04647	8.94	0.04	9.48	6.00	3.00			Small intestine	Pancreas	Brain
8552	489819	Hs.184670	AA009153	49.52	0.00	4951613.79	14.00	1.00	22	93.94	Placenta	Neural	Bone
8553	345123	Hs.8037	N72187	55.92	1.30	42.80	15.00	2.00	4	488.82	CNS	Brain	Pooled
8555	503639	Hs.171637	AA133665	9.82	1.52	6.44	0.00	1.00	19	238.35	Nose	ForeSkin	Whole embryo
8559	335059	Hs.29664	N62417	6.25	0.82	7.63	1.00	2.00	6	220.71	Adipose	CNS	Heart
8560	454083	Hs.7541	AA676988	17.83	0.32	55.54	9.00	6.00	16	442.79	Pool	Whole embryo	Brain
8564	810457	Hs.108319	AA457137	5.38	0.10	53.87	6.00	6.00			Ovary	Pooled	Lung
8566	809430	Hs.86737	AA458453	10.38	1.00	10.38	4.00	0.00			Tonsil	Tonsil	Parathyroid
8569	301627	Hs.132739	N78548	28.76	4.30	6.22	5.00	1.00	4	28.12	Ignore	Thyroid	Bone Cell
8570	811585	Hs.79381	AA454612	6.17	1.00	6.17	2.00	0.00			CNS	Thyroid	LID not found
8576	754034	Hs.11166	AA479058	22.60	0.41	55.24	9.00	6.00	10	542.11	Pool	Ovary	LID not found
8580	415437	Hs.171635	N81124	21.25	2.89	7.36	2.00	0.00	X	245.06	Pooled	Whole embryo	Lung
8582	805595	Hs.107302	AA458480	16.39	1.59	10.41	2.00	0.00	3	143.02	Pooled	Lung	LID not found
8584	345553	Hs.65424	N73389	16.43	0.10	16.47	8.00	6.00			Colon	Pool	Parathyroid
8585	302120	Hs.50852	N79813	5.40	0.05	116.09	1.00	0.00	19	101.7	Blood	Pool	Parathyroid
8586	133930	Hs.108687	R28004	14.12	0.80	23.94	8.00	6.00	1	553.7	Placenta	Eye	Pool
8588	430235	Hs.2178	AA010223	6.40	0.28	22.66	8.00	6.00	19	235.13	Liver	Prostate	Pool
8591	428507	Hs.152894	AA004525	28.87	3.97	7.28	1.00	0.00	5	511.5	Lung	LID not found	Other
8593	301067	Hs.50944	N81032	6.73	0.05	128.98	1.00	0.00	4	681.81	Testis	Whole embryo	Placenta
8594	795746	Hs.78200	AA460299	36.02	5.32	6.77	2.00	0.00	15	65.19	Stomach	Bone	ForeSkin
8597	324951	Hs.40098	N48352	120.04	0.01	13220.11	23.00	6.00	12	218.98	Omentum	Peripheral ner	Cervix
8600	884768	Hs.74637	AA025591	24.86	0.16	160.22	9.00	6.00	14	72.52	CNS	Parathyroid	Tonil
8603	290552	Hs.187031	N69007	10.41	1.45	7.18	1.00	0.00	10	165.83	Aorta	Testis	Whole embryo
8606	324220	Hs.210721	AA3284184	295.30	11.14	26.50	5.00	1.00	2	838.07	Neural	Kidney	ForeSkin
8615	365517	Hs.137637	AA009593	108.81	19.07	5.76	2.00	1.00			Head and nec	Heart	Brain
8623	365543	Hs.122677	AA006828	9.16	1.00	8.16	2.00	0.00	1	102.62	Pooled	Placenta	Colon
8627	324946	Hs.184154	AA3284281	73.80	8.72	7.58	2.00	0.00	X	231.75	Cervix	Placenta	Pool
8630	810446	Hs.89984	AA457115	17.82	1.00	17.82	1.00	4.00	20	251.44	Gall bladder	Aorta	CNS
8632	434440	Hs.1179	AA577306	5.90	0.12	49.50	2.00	0.00			Pool	LID not found	Other
8635	262023	Hs.172456	H95653	106.20	17.49	6.24	1.00	0.00	16	98.99	Nose	Pooled	Heart
8638	771254	Hs.59838	AA443562	32.62	6.23	5.24	2.00	1.00	2	551.37	Ear	Ovary	Tonil
8639	430320	Hs.208882	AA010406	30.29	3.53	8.58	2.00	0.00	4	178.45	Skin	Umbilical cord	Testis
8641	431608	Hs.81469	AA678139	27.80	4.83	5.75	1.00	0.00			Pool	LID not found	Lung
8642	755630	Hs.88844	AA419264	14.88	1.90	7.84	1.00	0.00	8	444.13	Germ Cell	ForeSkin	Testis
8644	68207	Hs.8521	T52699	5.94	1.00	5.84	1.00	1.00			Pooled	Heart	Tonil
8646	249803	Hs.199263	H64871	48.22	4.31	11.19	9.00	1.00			Ovary	Heart	LID not found
8647	781089	Hs.158626	AA430032	98.44	6.12	16.08	3.00	0.00	2	551.37	Ear	Tonil	Stomach
8651	121454	Hs.1200	T97278	6.40	1.17	5.48	1.00	0.00	4	178.45	Skin	Umbilical cord	Testis
8652	76308	Hs.180033	T60082	27.69	5.14	5.38	1.00	0.00			Lung	Pool	LID not found
8653	270560	Hs.170114	N32327	8.54	1.49	5.74	1.00	0.00			Adipose	Thyroid	Stomach

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8637	744917	Hs.11342	A0525806	36.22	6.29	5.76	1.00	0.00	9	305.41	Adipose	Kidney	Blood
8639	729172	Hs.171963	N46843	8.00	0.50	12.10	1.00	0.00	16	216.34	CNS	Brain	Eye
8654	85836	Hs.181044	T72088	5.38	0.95	5.86	1.00	0.00	5	124.25	Liver	Kidney	Pool
8665	135681	Hs.117546	R63918	13.69	1.00	13.69	1.00	2.00	20	209.9	Aorta	Brain	Placenta
8668	366105	Hs.106019	AA071528	10.72	0.69	15.54	8.00	4.00	6	115.7	Intest	Pooled	Heart
8667	714213	Hs.82258	A4293571	54.38	4.80	11.32	8.00	3.00	10	421.81	Spleen	Adrenal gland	CNS
8669	271684	Hs.169387	N25079	132.97	22.93	5.80	1.00	0.00	6	115.59	Small intestine	Aorta	Gall bladder
8671	73596	Hs.35036	T35907	48.51	1.00	40.51	2.00	2.00	1	171.89	Aorta	Tonsil	Spleen
8672	84229	Hs.83313	T72825	22.70	3.06	7.14	3.00	0.00	7	178.69	Bone	Pooled	Liver
8673	161998	Hs.108705	H28182	23.56	2.88	6.18	3.00	0.00	1				
8674	771268	Hs.184276	AA425299	83.69	11.98	5.32	1.00	0.00	17	414.56	Liver	Thymus	Lymph
8675	212188	Hs.1252	H88848	39.11	3.15	12.41	13.00	2.00	12	244.17	Placenta	Aorta	Spleen
8676	68784	Hs.206501	T33404	26.92	5.00	5.78	2.00	0.00	19			UD not found	Other
8678	38943	Hs.169457	R53527	7.40	1.00	7.40	1.00	1.00	19	86.49	Nose	Ovary	Kidney
8682	857319	Hs.280811	AA688703	45.26	1.32	34.42	8.00	5.00	X	277.53	Neural	Muscle	Adrenal gland
8685	662497	Hs.175714	AA678604	23.37	0.10	226.74	9.00	6.00	4				
8687	745268	Hs.70592	AA400151	29.92	1.00	29.92	2.00	2.00	X				
8689	447365	Hs.159829	AA702653	5.74	0.00	574355.96	1.00	0.00	4	556.54	Thymus	Adipose	Umbilical cord
8691	786690	Hs.79274	AA451895	850.49	69.50	9.38	4.00	0.00	15	277.47	Placenta	Parathyroid	Blood
8692	69988	Hs.172003	T54164	14.64	0.00	146408.69	15.00	0.00	12	43.34	Head and neck	Umbilical cord	Pooled
8694	686559	Hs.103315	AA117043	57.68	0.55	104.87	8.00	6.00	4	634.7	Liver	Pooled	Spleen
8701	725927	Hs.155650	AA282382	22.41	0.00	50023.08	1.00	0.00	8	568.23	CNS	Paracress	Blood
8705	761139	Hs.90786	AA428495	21.32	1.00	21.32	2.00	3.00	17	338.98	Esophagus	Liver	Adipose
8706	726777	Hs.187858	AA292226	50.62	1.74	29.06	0.00	4.00	X	351.05	Smooth muscle	Fore skin	Skin
8707	653687	Hs.904	AA688426	23.35	2.54	9.20	0.00	2.00	1	280.85	Muscle	Pooled	Eye
8711	841338	Hs.151032	AA687426	9.90	1.00	9.90	3.00	2.00	1	137.39	Larynx	Breast	Parathyroid
8712	84965	Hs.166551	T74768	14.80	1.97	7.52	1.00	0.00	5	566.98	Blood	Testis	Testis
8713	659807	Hs.102588	AA686527	76.02	14.51	5.45	1.00	0.00	6	561.27	Foraskein	Parathyroid	LID not found
8721	491565	Hs.82071	AA115076	80.64	11.61	6.95	4.00	0.00	17	539.74	Paracress	Codon	Aorta
8728	502151	Hs.65838	AA128777	33.85	1.23	27.43	5.00	1.00	17				
8734	757468	Hs.86102	AA428374	88.66	3.15	21.80	8.00	1.00	4			Germ Cell	Heart
8735	772512	Hs.25598	AA479910	14.64	1.00	14.64	3.00	2.00	5	130.24	Aorta	Breast	Brain
8736	46694	Hs.103720	H10192	20.27	3.24	6.25	1.00	0.00	7	519.26	Brain	Placenta	Uterus
8738	324655	Hs.126256	V47101	1365.43	2.54	538.87	23.00	5.00	2	411.43		Blood	LID not found
8739	376298	Hs.164890	AA041251	120.93	4.34	27.90	14.00	2.00	6	23.41	Stomach	Adipose	Pooled
8740	77238	Hs.9123	T50197	18.18	1.32	14.49	2.00	0.00	19			UD not found	Other
8742	625875	Hs.25740	AA186804	48.43	9.02	5.37	1.00	0.00	17	21.55	Cervix	Stomach	Aorta
8743	843048	Hs.171685	AA484413	11.07	0.10	109.27	9.00	6.00	20	332.76	Uterus	Synovial mem	Bone
8746	484874	Hs.85296	AA037229	8.45	1.31	6.44	1.00	0.00	10	554	Brain	Prostate	Whole embryo
8747	487165	Hs.10590	AA045074	11.52	0.10	115.24	9.00	6.00	11	373.42	Muscle	Ecophagus	Brain
8751	789866	Hs.100843	AA489470	10.87	0.08	129.81	9.00	6.00	4	422.79	Brain	Testis	LID not found
8752	47328	Hs.206577	AA483483	24.08	3.94	5.12	1.00	0.00	5	371.25	Stomach	Brain	Other
8755	768287	Hs.31040	H11274	6.52	0.74	23.05	3.00	0.00	10	355.49	Whole embryo	Fore skin	Tonsil
8760	47758	Hs.31415	H16262	8.90	1.17	7.59	1.00	0.00	10	87.85	Nose	Adipose	Breast
8765	52191	Hs.28253	H24355	11.70	1.71	8.84	2.00	0.00	10	448.63	Stomach	Cervix	Germ Cell
8776	80393	Hs.159838	H17625	160.22	26.78	5.98	2.00	0.00	10				
8780	72447	Hs.9328	T51620	8.86	1.06	5.45	1.00	0.00	18	370.09	Breast	Brain	Pooled
8782	213651	Hs.104925	H72122	194.72	5.33	38.52	8.00	2.00	4				
8783	784236	Hs.180532	AA446881	28.18	4.48	9.52	1.00	0.00	5				
8788	71902	Hs.8382	T52152	33.83	2.85	12.70	6.00	0.00	10				
8789	76182	Hs.107253	T59665	27.48	2.48	11.07	1.00	0.00	10				
8793	24718	Hs.25300	R38917	17.69	1.61	10.56	3.00	0.00	10				
8799	841492	Hs.72484	AA487252	31.74	6.07	5.23	0.00	1.00	18				
8801	251394	Hs.25318	R39044	179.12	0.91	186.48	23.00	6.00					

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8807	45344	Hs.101681	H05716	89.43	13.60	6.77	1.00	0.00	13	297.84	Brain	LID not found Other
8808	51879	Hs.203786	H23216	108.97	21.56	5.05	1.00	0.00	8	438.5	Brain	LID not found Other
8815	505376	AA155748	AA155748	6.35	0.00	63.9494.08	1.00	0.00	11	227.4	Uterus	Pool
8818	80338	Hs.7833	H05736	47.63	6.52	7.31	1.00	0.00	1	545.88	Thymus	Brain
8821	47169	Hs.30524	H10761	6.23	0.21	29.63	4.00	0.00	12	205.02	Spleen	LID not found
8822	133654	Hs.24158	R27457	59.50	3.11	19.11	7.00	1.00	12	205.02	Spleen	Whole embryoProstate
8828	877635	Hs.182658	AA625634	1708.10	280.34	8.09	1.00	1.00	12	205.02	Spleen	Whole embryoProstate
8829	50508	Hs.30542	H17506	86.19	8.12	9.97	3.00	1.00	12	205.02	Spleen	Whole embryoProstate
8830	50564	Hs.61145	AA045574	50.83	6.48	7.81	1.00	0.00	12	205.02	Spleen	Whole embryoProstate
8834	415807	Hs.18919	H86245	14.63	0.10	143.15	9.00	0.00	12	205.02	Spleen	Whole embryoProstate
8835	288157	Hs.37250	N30152	12.50	2.25	5.36	1.00	0.00	18	416.07	Bone	LID not found Other
8839	755909	Hs.21701	AA460347	9.93	1.27	7.84	2.00	0.00	9	394.48	Lymph node	Esophagus Blood
8842	415447	Hs.182682	H80381	36.08	3.71	0.72	11.00	0.00	6	308.33	Pool	LID not found Other
8850	416382	Hs.182682	H80381	7.10	0.26	27.78	3.00	0.00	6	308.33	Pool	LID not found Other
8851	810782	Hs.32343	AA457707	24.83	1.96	15.83	1.00	1.00	21	94.78	Esophagus	Heart Parathyroid
8852	280692	Hs.45061	N50515	5.50	0.99	5.60	1.00	0.00	12	485.55	Synovia intm	Stomach
8854	811581	Hs.21835	AA454605	25.87	1.00	25.87	7.00	0.00	4	488.82	Parathyroid	Brain
8855	321859	Hs.37282	W37372	16.21	2.16	7.50	3.00	0.00	13	237.88	CNS	Placenta Ovary
8859	284432	Hs.132572	N52315	5.42	1.00	6.42	2.00	0.00	13	237.88	CNS	Placenta Ovary
8862	200856	Hs.21651	R89407	41.29	1.00	41.29	1.00	4.00	16	113.88	Pool	Heart Brain
8863	347772	Hs.37317	H81603	28.40	2.80	9.80	2.00	0.00	16	113.88	Pool	LID not found Other
8864	429011	Hs.17342	AA004719	68.75	2.36	28.28	3.00	0.00	16	113.88	Pool	LID not found Other
8865	430230	Hs.19110	AA010214	6.08	1.03	5.85	1.00	0.00	10	188.88	Pool	LID not found Other
8874	429424	Hs.193225	AA007687	6.55	0.10	65.47	8.00	4.00	10	188.88	Pool	LID not found Other
8875	10459	Hs.32659	AA457158	9.46	1.80	5.93	1.00	0.00	X	110.82	CNS	Eye Lung
8876	324307	Hs.8768	W47641	29.90	1.48	20.27	8.00	1.00	X	110.82	CNS	Eye Lung
8879	203888	Hs.200378	H56840	24.70	2.15	11.48	2.00	0.00	11	254.48	Pool	Brain
8883	240508	Hs.124147	H90767	85.84	7.27	11.77	2.00	0.00	9	327.05	Blood	Pancreas
8882	340508	Hs.45519	H58790	16.88	3.21	5.19	1.00	0.00	2	742.01	Omentum	Prostate Uterus
8890	490811	Hs.32969	AA133215	23.65	3.52	6.73	0.00	4.00	18	-10.98	Prostate	Pool LID not found
8890	299465	Hs.184244	N71080	108.26	1.49	73.33	9.00	0.00	18	-10.98	Prostate	Pool LID not found
8892	307337	Hs.22039	H82226	6.00	1.00	6.09	0.00	1.00	2	178.29	Thyroid	Pool Spleen
8898	282810	Hs.48472	H85041	43.79	3.74	11.70	2.00	0.00	2	647.77	CNS	Brain
8898	282810	Hs.48472	H85041	7.09	0.55	12.89	7.00	6.00	17	63.8	Gall bladder	Pool Placenta
8922	415122	Hs.108184	H85041	6.65	0.86	6.76	1.00	0.00	1	185.03	Drain	Germ Cell
8931	487141	Hs.173319	AA045340	81.37	8.62	6.38	1.00	1.00	22	631.68	Esophagus	Adipose Cervix
8932	502499	Hs.75835	AA156863	34.29	1.01	33.84	9.00	1.00	22	126.78	Omentum	Pancreas
8936	549933	Hs.624	AA102526	121.81	0.85	143.16	21.00	6.00	14	251	Omentum	Pancreas
8937	429628	Hs.58300	AA039887	11.77	1.75	8.73	2.00	0.00	14	251	Omentum	Pancreas
8938	808993	Hs.205070	AA454861	146.42	9.94	14.74	3.00	1.00	2	631.79	Pool	LID not found Other
8940	283315	Hs.46038	N45318	26.38	0.00	6.89	2.00	0.00	2	631.79	Pool	LID not found Other
8943	195359	Hs.107815	R89554	73.76	10.55	6.99	2.00	0.00	2	631.79	Pool	LID not found Other
8944	840460	Hs.109703	AA485855	28.95	5.11	5.26	1.00	0.00	13	265.37	Pool	Lymph Lung
8945	416054	Hs.59329	W90726	48.44	6.95	8.16	1.00	0.00	13	265.37	Pool	Lymph Lung
8947	377731	Hs.75652	AA455232	53.23	2.75	19.38	15.00	5.00	3	52.58	CNS	Pool Brain
8948	897177	Hs.181013	AA075970	766.34	77.51	10.15	5.00	0.00	3	52.58	CNS	Pool Brain
8949	488888	Hs.177192	AA046087	67.27	11.52	5.84	0.00	2.00	2	188.28	Synovial men	Thyroid Head and neck
8952	310408	Hs.93913	N85531	70.02	0.86	81.50	22.00	5.00	7	99.58	Small intestine	Head and neck
8955	810349	Hs.182667	AA464168	26.42	4.41	6.00	1.00	0.00	9	411.01	Peripheral nar	Omentum Muscle
8956	489628	Hs.75160	AA089168	56.79	5.36	10.59	3.00	0.00	12	213.52	Gall bladder	Ovary Uterus
8957	487959	Hs.63131	AA054585	6.32	1.00	6.32	0.00	1.00	4	615.42	Synovial men	Lung LID not found
8960	289008	Hs.188132	N59270	10.72	1.96	5.48	1.00	0.00	4	615.42	Synovial men	Lung LID not found
8961	340873	Hs.28719	W55349	11.81	1.00	11.81	1.00	1.00	1	612.3	Thyroid	Stomach Lymph
8967	195347	Hs.184603	R83225	157.87	15.78	10.01	2.00	0.00	9	18.98	Ignore	Pancreas
8968	757440	Hs.327	AA437226	22.65	0.65	34.71	6.00	0.00	11	378.48	Ignore	Pancreas
8969	418435	Hs.203337	W83024	80.21	15.43	5.84	2.00	0.00	X	137.28	Pool	Brain LID not found
8971	368315	Hs.108587	AA025746	12.82	0.30	42.44	9.00	6.00	19	89.4	Pool	Colon Ovary

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8973	377217	Hs.83183	AA055178	34.03	1.77	19.24	3.00	1.00	Heart	Pool	LID not found
8975	204569	Hs.176826	H67052	8.44	0.00	6402.16.60	3.00	0.00	316.62 Spleen	Testis	Pool
8976	491763	Hs.128256	AA150507	787.65	1.85	414.34	23.00	5.00	411.43	Blood	Pancreas
8977	428816	Hs.59432	AA004681	5.20	0.00	520414.87	1.00	0.00	Pool	LID not found	Other
8978	460377	Hs.204042	AA138283	15.34	1.46	10.51	4.00	3.00	375.43	Blood	Germ Cell
8984	260035	Hs.641434	N30372	24.74	0.10	247.40	9.00	6.00	591.02	Tonsil	LID not found
8985	356958	Hs.124048	V63811	6.94	0.15	47.07	1.00	0.00	307.36	Esophagus	Synovial mem
8986	342008	Hs.74070	V60057	42.21	1.51	27.93	1.00	1.00	481.07	Cervix	Uterus
8988	862459	Hs.110384	AA675404	10.36	0.29	35.82	7.00	8.00	104.65	Parathyroid	Germ Cell
8989	782459	Hs.99120	AA477588	9.46	1.82	5.83	1.00	0.00	74.52	Parathyroid	Ovary
8997	810109	Hs.63300	AA464979	13.81	1.00	13.81	1.00	1.00	Testis	LID not found	Other
8998	702640	Hs.63300	AA464979	36.34	3.57	10.16	2.00	0.00	374.05	Small intestine	Bone
8999	250095	Hs.169478	H97146	46.51	1.79	25.44	9.00	2.00	430.39	Epididymis	Liver
9000	145112	Hs.168383	R77253	141.93	25.02	5.67	1.00	0.00	527.66	Gall bladder	Acilia
9004	770444	Hs.80919	AA430558	58.14	5.16	11.27	8.00	0.00	592.38	Esophagus	Bone
9008	468989	Hs.118512	AA029934	136.05	6.63	20.82	8.00	2.00	510.85	Lymph	Pool
9011	308466	Hs.206507	N95495	27.71	5.44	5.10	0.00	1.00	289.73	Neural	Stomach
9014	808503	Hs.89367	AA454582	7.23	1.00	7.23	1.00	3.00	80.93	Uterus	Brain
9016	754406	Hs.195584	AA438187	17.44	0.55	31.71	9.00	6.00	485.13	Head and nec	Adrenal gland
9021	502978	Hs.78605	AA149287	11.54	1.00	11.54	2.00	5.00	612.88	Ear	Umbilical cord
9033	241481	Hs.5353	H60712	521.06	76.06	6.85	2.00	0.00	471.4	Kidney	Pool
9034	756887	Hs.180816	AA443899	364.12	10.38	35.10	23.00	6.00	683.1	Ear	Brain
9035	773260	Hs.54842	AA425224	155.84	17.87	6.81	5.00	0.00	411.43	Larynx	Head and nec
9036	128753	Hs.132219	R16533	78.99	0.46	175.38	21.00	6.00	120.56	Pool	Pancreas
9039	511164	Hs.6329	H16004	11.31	1.90	5.95	1.00	0.00	115.84	Placenta	CNS
9041	740941	Hs.74120	AA478298	80.72	1.16	78.47	7.00	4.00	91.19	Pool	LID not found
9043	773240	Hs.105226	AA425769	60.71	9.44	6.43	2.00	0.00	392.48	Lymph	Tonsil
9045	131886	Hs.10620	R32439	41.83	6.01	5.22	1.00	0.00	674.5	Pool	Heart
9051	125187	Hs.80987	R05603	20.95	2.74	7.85	2.00	0.00	466.83	Adrenal gland	Eye
9052	79525	Hs.173091	T82439	42.32	3.71	11.40	5.00	0.00	247.50	Neural	Breast
9056	31740	Hs.169363	R41973	16.11	0.69	23.36	3.00	0.00	44.3	Foreskin	Testis
9057	435024	Hs.75361	AA700048	11.78	1.00	11.78	5.00	1.00	576.82	CNS	Pool
9060	469556	Hs.13628	H16086	103.13	15.27	6.75	2.00	0.00	201.27	Pool	Foreskin
9064	320833	Hs.102479	R42668	86.46	6.29	11.04	1.00	0.00	Whole embryo	Pool	Colon
9067	731308	Hs.74335	AA416759	82.83	5.14	16.12	6.00	0.00	Whole embryo	Pool	Brain
9069	265292	Hs.43534	N26565	14.65	0.92	23.45	1.00	0.00	Stomach	Adipose	Adrenal gland
9071	45417	Hs.6869	H09720	5.72	1.14	5.00	2.00	0.00	289.37	Testis	Whole embryo
9072	45463	Hs.22195	H09196	8.28	0.28	20.34	2.00	0.00	Ignore	Lymph	Brain
9073	246872	Hs.183123	N59115	21.99	2.88	7.62	5.00	0.00	75.99	Heart	Thymus
9076	51405	Hs.169587	H18949	15.66	1.47	10.87	1.00	0.00	Prostate	Germ Cell	Brain
9081	745138	Hs.98102	AA625698	602.66	86.82	6.94	4.00	0.00	628.1	Foreskin	Prostate
9083	308893	Hs.1118	N94487	935.18	0.00	131.84	20.00	2.00	365.17	Larynx	Gall bladder
9086	757873	Hs.2859	AA442853	72.51	0.55	131.84	9.00	6.00	289.09	Larynx	Eye
9087	46241	Hs.6917	H09739	6.81	0.41	16.76	9.00	0.00	400.44	Skin	Umbilical cord
9089	902833	Hs.78110	N90109	345.22	67.29	5.13	1.00	0.00	166.82	Gall bladder	Foreskin
9097	857640	Hs.4217	AA633747	5.31	1.00	5.31	1.00	3.00	117.5	Aorta	Head and neck
9098	773280	Hs.210587	AA425336	168.30	30.65	5.46	2.00	0.00	197.69	Aorta	Ovary
9100	45901	Hs.14763	H09332	41.35	8.14	5.08	1.00	0.00	75.2	Whole embryo	Parathyroid
9107	824634	Hs.744	AA187349	76.24	1.00	76.24	9.00	2.00	317.73	Pool	Kidney
9108	725395	Hs.169895	AA292074	54.84	6.40	8.57	2.00	0.00	Nose		Adrenal gland
9110	824754	Hs.196838	AA187148	6.58	0.17	35.75	8.00	6.00			
9113	45464	Hs.171811	H09750	36.35	2.88	12.81	1.00	0.00			
9114	280724	Hs.90599	N71782	34.16	2.28	14.96	7.00	1.00			
9115	415388	Hs.18573	V90489	16.80	1.85	6.83	2.00	0.00			
9116	46353	Hs.184380	H09747	7.96	0.77	10.34	3.00	0.00			
9121	78562	Hs.57549	T62844	23.95	3.90	5.88	1.00	0.00			
9127	781444	Hs.107231	AA428604	95.31	6.78	14.07	2.00	0.00			

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8128	840554	Hs.10920	AA487899	147.38	25.51	5.78	1.00	0.00	3	49.53 Foreskin	Adrenal gland	Stomach
8129	743182	Hs.5790	AA400022	18.92	2.38	7.90	3.00	0.00	22	118.42 Skin	Blood	Adrenal gland
8130	761013	Hs.86949	A4446025	11.65	0.70	16.57	1.00	0.00		Testis	Germ Cell	Kidney
8131	309408	Hs.116754	N69048	20.37	3.48	5.91	1.00	0.00		Eye	Colon	Heart
8133	39977	Hs.172740	R52526	13.66	1.78	7.66	3.00	0.00	2	97.77 Stomach	Brain	Bone
8135	269748	Hs.7471	N27118	93.76	9.41	9.97	1.00	0.00	8	180.9 Foreskin	Placenta	Prostate
8136	71285	Hs.138805	T47601	13.00	1.86	7.46	2.00	0.00		CNS	Prostate	Pool
8150	308148	Hs.163831	N50523	9.58	1.87	5.10	1.00	0.00	1	537.1	Uterus	Ovary
8152	73900	Hs.108408	T55608	24.59	2.51	9.78	1.00	0.00	7	484.94 Aorta	Whole embryo/foreskin	
8154	898044	Hs.177535	A4598945	28.41	1.32	17.34	0.00	0.00	7	262.43	Lymph	Cervix
8162	784109	Hs.110708	AA432086	70.84	10.63	6.46	3.00	0.00	2	599.98 Gall bladder	Muscle	Placenta
8163	843195	Hs.56407	AA488432	129.58	0.92	141.38	9.00	0.00	11	297.54 Spleen	LID not found	Other
8168	677118	Hs.101354	AA190529	77.08	13.44	5.53	3.00	0.00	10	393.85 Cervix	Liver	Testis
8168	67741	Hs.193322	T49635	31.56	5.71	9.37	1.00	0.00	X	356.17 Pool	Prostate	Ovary
8173	842848	Hs.129810	AA466231	9.47	1.01	9.37	1.00	0.00	12	446.49 Placenta	Adrenal gland	Pooled
8174	596931	Hs.90758	T69593	6.07	0.78	8.03	1.00	0.00	X	138.53 CNS	Ear	
8174	596931	Hs.103816	AA130868	17.57	2.20	8.00	1.00	0.00	10	509.85 Brain	Muscle	Kidney
8176	705900	Hs.203492	T48942	78.38	2.24	34.99	20.00	4.00	5	365.05 Synovial mem	Cervix	Skin
8181	47671	Hs.91389	H11487	47.89	5.57	8.99	12.00	1.00	10	67.85 Brain	LID not found	Other
8186	34345	Hs.12457	R44163	30.46	1.42	21.51	9.00	0.00	8	439.53 Brain	LID not found	Other
8197	50007	Hs.91627	H16736	8.97	0.00	897.132 48	7.00	0.00	15	55.16 Esophagus	Gall bladder	Foreskin
8200	73252	Hs.77910	T56013	38.57	2.67	14.83	7.00	0.00	15	288.07	Thymus	Foreskin
8207	594724	Hs.8170	AA172048	171.26	31.71	5.40	1.00	0.00	2	575.76	LID not found	Other
8212	32575	Hs.107253	R43535	24.21	1.00	24.21	2.00	4.00	12	426.87 Foreskin	Muscle	Breast
8213	31969	Hs.91678	R41994	20.99	1.00	20.99	9.00	0.00	5	493.16 Cervix	Parathyroid	Breast
8218	504308	Hs.14559	AA131909	25.48	2.02	12.63	4.00	0.00	17	88.85 CNS	Cervix	Lung
8226	503689	Hs.164591	AA131760	43.62	4.75	9.19	1.00	0.00	17	17.85 Adrenal gland	CNS	Whole embryo
8227	809507	Hs.76294	AA454563	15.47	0.55	28.13	9.00	0.00	8	515.7 Breast	Heart	Ovary
8235	290597	Hs.102824	N71892	120.59	23.11	5.22	1.00	0.00	15	330.57 Lung	Testis	Pool
8236	263010	Hs.164863	H99811	52.76	10.14	5.20	1.00	0.00	15	53.59 Lymph	Adrenal gland	Pooled
8242	121232	Hs.169763	T69593	7.88	1.58	5.04	1.00	0.00	17	603.5 Eye	Breast	
8244	415134	Hs.181016	N63154	15.55	3.06	5.08	1.00	0.00	6	603.5 Eye	Pool	LID not found
8247	278729	Hs.188711	N62936	37.50	4.04	9.29	3.00	0.00	12	426.87 Foreskin	Pool	LID not found
8248	272600	Hs.132913	N35922	22.15	3.67	6.03	1.00	0.00	5	493.16 Cervix	Parathyroid	Breast
8251	428470	Hs.184868	AA007634	17.93	2.85	6.19	1.00	0.00	17	88.85 CNS	Cervix	Lung
8262	308495	Hs.17301	N95558	11.67	1.28	9.27	1.00	0.00	17	17.85 Adrenal gland	CNS	Whole embryo
8271	809533	Hs.29206	AA454564	25.13	1.48	17.21	5.00	1.00	8	515.7 Breast	Heart	Ovary
8275	289332	Hs.183914	N75569	220.92	14.97	14.75	2.00	1.00	15	330.57 Lung	Testis	Pool
8278	258934	Hs.203488	N29328	6.28	1.13	5.54	1.00	0.00	15	53.59 Lymph	Adrenal gland	Pooled
8280	468984	Hs.158705	AA043878	30.18	2.27	13.32	3.00	0.00	17	603.5 Eye	Pool	LID not found
8283	309603	Hs.25700	N64435	14.64	2.71	5.39	0.00	1.00	6	603.5 Eye	Pool	LID not found
8290	417239	Hs.147115	V087939	6.05	0.75	8.12	1.00	0.00	1	629.85 Ear	Brain	Testis
8294	376784	Hs.17401	AA046321	16.01	2.55	6.28	1.00	0.00	11	409.68 Eye	Spleen	Aorta
8299	811605	Hs.25709	AA454617	37.87	0.98	44.20	10.00	6.00	1	95.51 Lymph node	Smooth muscle	Parathyroid
8300	782462	Hs.168244	AA431435	6.36	0.91	6.05	1.00	0.00	14	147.53 Pooled	Umbilical cord	Eye
8303	502164	Hs.183653	AA134753	36.22	6.93	5.22	2.00	0.00	11	387.71 Eye	Lung	Germ Cell
8308	771004	Hs.415865	AA427719	57.40	1.19	48.09	22.00	6.00	2	101.44 Skin	Cervix	Bone
8314	322057	Hs.74711	V037375	57.52	6.84	8.41	1.00	0.00	10	511.41	Cervix	Bone
8319	359722	Hs.192516	AA011182	5.76	0.55	10.46	6.00	0.00	X	351.05 Adrenal gland	CNS	Brain
8320	769666	Hs.125358	AA486283	97.13	3.55	27.36	4.00	3.00	4	71.55 Gall bladder	Pooled	Foreskin
8322	323165	Hs.73821	V042587	356.77	50.17	7.11	2.00	1.00	10	492.82 Smooth muscle	Esophagus	Cervix
8324	248897	Hs.21187	H79878	13.56	1.39	9.76	2.00	0.00	6	501.47 Placenta	LID not found	Other
8330	262500	Hs.168887	N49853	8.19	1.18	6.92	3.00	0.00				
8332	257421	Hs.169988	N27179	54.22	0.82	87.36	17.00	2.00				
8333	795191	Hs.96542	AA453477	56.12	9.63	5.83	2.00	0.00				
8337	134263	Hs.52264	R31180	5.20	0.00	519560.16	2.00	0.00				
8342	132072	Hs.185568	R26046	28.61	2.84	10.09	2.00	0.00				

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9348	246239	Hs.108479	N52482	5.26	0.98	5.50	2.00	0.00	14	270.55	Pooled	Pool	Germ Cell
9351	364613	Hs.137482	AA022684	6.18	0.48	13.48	1.00	0.00			Heart	Heart	LID not found
9355	287188	Hs.34348	N23340	25.74	5.10	5.05	1.00	0.00			Ovary	Cervix	Germ Cell
9358	241432	Hs.142827	H80885	34.81	5.68	6.13	1.00	0.00			Eye	Ear	Synovial membrane
9368	435330	Hs.31121	AA68928	6.31	0.10	63.11	8.00	6.00	17	347.46	Adipose	Testis	Pancreas
9373	782787	Hs.103147	AA448189	24.99	3.83	6.52	2.00	0.00	2	71.28	Larynx	Esophagus	Placenta
9376	525926	Hs.82109	AA074511	19.03	1.03	18.42	3.00	0.00	2	118.93	Muscle	Forekin	Pool
9377	271826	Hs.53031	N35260	414.27	78.93	6.38	1.00	0.00	2	227.19	Neural	Germ Cell	Breast
9379	270327	Hs.132875	N33030	26.59	4.30	6.19	3.00	0.00	15	419.03	Tonsil	Heart	Brain
9385	272658	Hs.172909	N32281	280.66	53.31	5.26	1.00	0.00	3	56.78	Uterus	Brain	Pool
9389	340642	Hs.192585	W55753	49.32	6.39	7.71	1.00	0.00	1	487.75	Adrenal gland	Eye	Foreskin
9391	502561	Hs.34174	AA157017	48.04	7.98	6.02	1.00	0.00	2	152.65	Thymus	Aorta	Small intestine
9395	270788	Hs.102479	N38800	24.70	2.13	11.58	4.00	0.00	1	278.45	Esophagus	Pooled	Breast
9400	855395	Hs.75760	AA664009	164.87	23.80	6.63	2.00	0.00	14	36.64	Brain	Spleen	Germ Cell
9417	272023	Hs.106389	H85557	13.20	0.54	24.34	6.00	4.00		47.55	Breast	Heart	Blood
9421	811046	Hs.70327	AA465427	16.58	0.10	167.32	9.00	6.00	12	224.16	Uterus	Kidney	Tonsil
9422	343700	Hs.94769	V89178	5.16	0.15	34.17	2.00	2.00	15	338.52	Synovial mem	Pancreas	Stomach
9423	1034778	Hs.173103	AA621535	11.79	1.00	11.79	2.00	2.00	9	399.97	Pooled	Ovary	Lymph
9424	40881	Hs.12315	R66055	5.37	0.86	9.61	3.00	0.00	17	345.1	Neural	Brain	Parathyroid
9425	377692	Hs.58482	AA058013	42.85	5.54	7.74	1.00	0.00	16	361.71	Liver	Prostate	Pool
9426	504673	Hs.103854	AA142943	17.54	1.00	17.54	3.00	0.00	9	255.41	Smooth muscle	Stomach	Adrenal gland
9427	814798	Hs.75746	AA455235	1602.82	3.80	422.01	5.00	5.00	19	7.28	Adipose	Whole embryo	Lung
9431	69046	Hs.19261	T34320	75.90	11.59	6.35	5.00	0.00	8	184.3	Smooth musc	Forekin	Muscle
9438	745116	Hs.83653	AA626370	53.87	5.87	8.17	3.00	0.00	12	383.82	Smooth musc	Forekin	Adrenal gland
9439	47783	Hs.152433	H11936	5.83	1.00	115.62	8.00	6.00	10	508.5	Aorta	Adrenal gland	Forekin
9441	75353	Hs.110440	T56281	115.62	1.00	115.62	8.00	6.00	18	241.92	Breast	Blood	Eye
9443	856824	Hs.76382	AA684101	110.06	2.85	37.31	5.00	5.00	13	266.03	Pooled	Ovary	Forekin
9445	811024	Hs.118110	AA485371	110.39	3.35	32.91	2.00	5.00	16	410.68	Cervix	Gall bladder	Thyroid
9449	204257	Hs.2442	H59231	280.46	8.37	27.81	16.00	0.00	8	99.1	Synovial mem	Pooled	Whole embryo
9450	853574	Hs.184697	AA63440	23.96	0.56	42.80	9.00	8.00	X	274.36	Testis	Pool	LID not found
9453	90888	Hs.75484	H18203	382.75	13.36	28.84	4.00	0.00	5	504.31	Brain	LID not found	Other
9454	361698	Hs.96351	V89325	34.82	0.55	63.31	8.00	5.00	6	117.99	Smooth musc	Nose	Esophagus
9459	854878	Hs.155402	AA600354	32.63	3.75	8.89	2.00	0.00	5	572.03	Pooled	Prostate	Breast
9462	773568	Hs.74085	AA428198	6.62	1.57	5.47	1.00	0.00	6	596.53	Forekin	Umbilical cord	Heart
9467	588828	Hs.75102	AA195571	17.24	1.00	17.24	3.00	2.00	14	139.45	Omentum	Muscle	Pancreas
9470	1031076	Hs.83354	AA676458	75.17	1.00	75.17	18.00	2.00	8	333.24	Forekin	Spleen	Lung
9471	742547	Hs.68176	AA610068	17.18	0.10	171.84	9.00	0.00	17	89.67	Colon	Heart	Brain
9472	41843	Hs.14945	R52682	30.49	4.29	7.10	2.00	0.00	6	549.63	Lymph node	Synovial mem	Umbilical cord
9478	888332	Hs.814	AA634028	53.84	9.75	5.52	0.00	2.00	17	284.1	Forekin	CNS	Heart
9483	241489	Hs.2551	H90431	6.55	0.52	12.75	1.00	0.00	22	117.26	Ignore	Larynx	Small intestine
9485	472186	Hs.32217	AA057378	43.47	4.00	10.87	7.00	0.00	11	417.79	Heart	Brain	LID not found
9487	33076	Hs.203924	R44046	33.35	5.93	5.63	1.00	0.00	12	426.48	Ignore	Ignore	Parathyroid
9491	562813	Hs.89570	AA086476	5.73	0.32	17.78	6.00	0.00	12	397.57	Adrenal gland	Ovary	Blood
9492	72684	Hs.77558	T57241	16.19	1.00	16.19	6.00	3.00	2	594.44			
9499	377252	Hs.45743	AA055350	16.49	2.38	6.93	1.00	0.00					
9505	40728	Hs.25402	R33945	6.81	0.50	13.75	2.00	0.00					
9508	637904	Hs.74267	AA434086	1294.93	220.14	5.88	2.00	0.00					
9508	73526	Hs.9905	T55547	91.83	4.28	7.49	3.00	0.00					
9516	67167	Hs.10104	T56804	7.90	1.10	7.20	1.00	0.00					
9520	593840	Hs.3447	AA168810	103.59	8.09	11.40	4.00	4.00					
9523	843261	Hs.8482	AA485934	30.59	4.41	8.04	2.00	0.00					
9525	51581	Hs.30581	H22824	7.32	0.25	11.00	1.00	0.00					
9528	328018	Hs.3593	V42508	37.56	7.50	5.01	1.00	0.00					
9533	52749	Hs.15359	H29590	21.50	3.30	6.54	2.00	0.00					
9534	582818	Hs.173484	AA168252	6.03	0.65	10.97	8.00	6.00					
9537	49944	Hs.24550	H29215	50.41	0.00	5040796.33	14.00	0.00					

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8642	511218	Hs.146246	AA65713	11.09	2.08	5.38	1.00	0.00	6	Cervix	Lymph	Pool
8650	555420	Hs.137005	AA173573	34.13	6.21	5.50	1.00	0.00	8	512.44 Smooth muscle	Thyroid	Pooled
8653	471186	Hs.91708	H10403	5.85	0.00	564514.87	3.00	0.00		32.97 Spleen	Whole embryo	Brain
8660	950781	Hs.3391	AA608446	32.77	4.55	7.20	2.00	0.00		Parathyroid	CNS	Cervix
8662	285148	Hs.198092	N21576	6.20	0.00	619515.85	1.00	0.00	2	Forebrain	Kidney	Pool
8663	843293	Hs.21589	AA488672	66.43	6.57	10.12	5.00	1.00		642.44 Cervix	CNS	Breast
8664	74512	Hs.10477	T59014	6.66	0.00	688443.12	1.00	0.00	1	Spleen	LID not found	Other
8665	345890	Hs.194695	W72033	392.30	2.49	157.37	23.00	5.00		183.83 Brain	Heart	Testis
8673	48331	Hs.30880	H29257	198.31	37.08	5.79	1.00	0.00	1	Whole embryo	Brain	Tonsil
8680	78179	Hs.10815	T59670	6.29	0.75	8.41	2.00	0.00	7	Ovary	LID not found	Other
8682	583537	Hs.193608	AA185410	5.71	0.00	570715.28	4.00	0.00		478.90 Spleen	Ovary	Whole embryo
8683	51966	Hs.928	H23111	40.07	7.33	6.25	2.00	0.00	2	128.3	Pancreas	Cervix
8684	843283	Hs.4208	AA488652	121.54	24.89	5.04	1.00	0.00	1	155.09 Nose	LID not found	Other
8689	416095	Hs.163668	V85380	83.88	11.83	5.40	1.00	0.00	18	335.99 Peripheral nervous system	Thyroid	Thyroid
8690	502891	Hs.155101	AA135824	32.07	4.66	6.47	1.00	0.00	17	24.51 Pooled	Brain	Uterus
8696	491764	Hs.22178	AA150502	7.49	0.08	96.31	9.00	6.00	11	339.45 Aorta	Pool	LID not found
8697	204442	Hs.132634	H56000	17.82	3.14	6.68	1.00	0.00	10	359.28	CNS	LID not found
8698	248232	Hs.125024	N58473	153.16	8.57	17.87	2.00	0.00	3	135.47 Pool	LID not found	Other
8699	417707	Hs.18313	V85965	9.75	1.09	8.91	2.00	0.00	3	508.07 Breast	Brain	Uterus
8702	503128	Hs.199938	AA151563	8.33	0.62	13.34	2.00	0.00	10	LID not found	Other	
8706	427809	Hs.19452	AA001970	7.80	0.39	20.19	5.00	0.00	3	101.09 Pooled	Pool	LID not found
8709	415010	Hs.19585	W63088	13.75	1.91	7.20	6.00	0.00	8	127.04 Pool	LID not found	Other
8713	194607	Hs.33439	R37650	78.28	3.07	25.47	3.00	0.00	2	39.86	CNS	LID not found
8714	429352	Hs.81715	AA007516	37.46	4.27	8.77	7.00	1.00	3	880.35	CNS	LID not found
8715	358947	Hs.46564	W68452	21.92	0.00	2182466.45	13.00	0.00	11	274.11 Germ Cell	Heart	LID not found
8716	811565	Hs.19597	AA454600	8.80	1.61	6.09	1.00	1.00	14	251 Pool	Prostate	Heart
8717	357288	Hs.22483	V03588	10.22	1.84	6.56	1.00	0.00	15	227.04 Blood	LID not found	Other
8718	240653	Hs.75621	H90292	6.56	1.21	5.87	1.00	0.00	18	269.05 Prostate	Pool	LID not found
8719	191856	Hs.158082	AA0350	5.08	0.93	5.44	1.00	3.00	19	18.31 Esophagus	Brain	Eye
8720	279184	Hs.49007	N46321	44.10	6.79	6.50	1.00	0.00	17	347.35 Small intestine	Skin	Thyroid
8721	124895	Hs.113200	R08123	25.73	1.84	13.85	4.00	0.00	3	161.69 Lymph	Heart	LID not found
8722	428952	Hs.160187	AA048003	5.28	1.00	5.28	0.00	1.00	12	489.78 Forebrain	Tonsil	Breast
8723	385991	Hs.167765	AA065815	6.99	0.40	17.56	1.00	0.00	7	208.72	Breast	Lung
8724	770872	Hs.7724	AA478273	20.81	2.55	8.07	1.00	0.00	2	667.62 Thyroid	Prostate	Germ Cell
8725	303180	Hs.64753	N92764	6.00	0.08	78.29	7.00	6.00	11	16.42	Skin	Whole embryo
8726	755402	Hs.853	AA424695	128.73	4.88	10.05	5.00	1.00	2	703.17 Neural	Thyroid	Pancreas
8727	347516	Hs.94893	W81410	99.97	9.94	10.05	2.00	0.00	1	75.41	Eye	Parathyroid
8728	755301	Hs.155342	AA496360	5.63	0.90	6.37	0.00	5.00	10	374 Adrenal gland	Bone	Bone
8729	292223	Hs.167045	N62464	96.86	4.23	22.86	9.00	6.00	17	385.82 Thymus	Bone	Liver
8730	364002	Hs.177664	AA024827	5.78	0.87	8.89	2.00	0.00	1	82.84 Lymph	Thyroid	Testis
8731	434633	Hs.194932	AA703141	6.24	0.99	6.31	1.00	0.00	9	22.34 Pool	Tonsil	Synovial membrane
8732	343631	Hs.139327	W68659	11.35	0.55	20.51	3.00	2.00		82.84 Lymph	Thyroid	Testis
8733	68048	Hs.103361	T52830	6.72	1.00	6.72	2.00	5.00		22.34 Pool	Tonsil	Brain
8734	888551	Hs.58771	AA048525	5.84	0.61	8.77	2.00	0.00		Germ Cell	Lung	Heart
8735	286446	Hs.75863	AA460941	16.41	0.10	184.11	10.00	6.00		Lung	LID not found	
8736	796284	Hs.96063	AA460941	43.06	5.58	7.72	1.00	0.00				
8737	795315	Hs.58939	AA454172	98.40	18.28	5.27	1.00	0.00				
8738	503602	Hs.107767	AA131288	22.50	1.00	22.50	6.00	1.00				
8739	771260	Hs.65135	AA443565	15.81	1.42	11.13	4.00	0.00				
8740	810948	Hs.11861	AA469383	9.33	1.00	9.33	6.00	4.00				
8741	795564	Hs.99482	AA458874	5.70	0.00	570126.31	1.00	0.00				
8742	758405	Hs.76884	AA482119	58.00	0.10	580.03	9.00	6.00				
8743	212347	Hs.107924	H69286	26.95	2.03	13.29	1.00	1.00				
8744	428632	Hs.169444	AA004528	43.78	6.53	6.71	1.00	0.00				
8745	795760	Hs.85412	AA460305	15.19	1.45	10.48	2.00	0.00				
8746	243868	Hs.181568	N35542	24.58	4.12	5.97	2.00	0.00				

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9770	782730	Hs.197419	AA447978	36.73	1.00	36.73	16.00	6.00	15	191.65	Neural	Adipose	Lymph
9764	755599	Hs.146390	AA419251	64.15	6.99	8.18	1.00	3.00	11	18.88	Nose	Skin	Adipose
9765	428282	Hs.60136	AA042612	8.09	1.46	5.33	1.00	0.00	7	111.94	Neural	Pool	LID not found
9767	610700	Hs.108963	AA457688	25.28	4.91	5.49	1.00	0.00	11	228.95	Ovary	Brain	LID not found
9766	50381	Hs.14896	H17035	28.79	4.93	5.49	1.00	0.00	11	54.46	Breast	CNS	Pool
9768	83540	Hs.1279	T69603	60.99	0.00	60.988134	14.00	2.00	12	45.7	Lymph node	Gall bladder	Stomach
9769	50219	Hs.7007	H16751	5.45	0.98	5.55	2.00	1.00	2	310.02	Brain	Lung	LID not found
9801	471769	Hs.8679	AA036455	20.29	1.02	19.99	4.00	0.00	1	27.1	Peripheral nec	Stomach	-
9802	725176	Hs.118721	AA01883	54.53	6.95	7.84	2.00	0.00	6	116.38	Neural	Fore skin	Skin
9807	45704	Hs.7023	H05130	5.23	0.27	19.37	2.00	2.00	8	341.87	Brain	LID not found	Other
9809	773478	Hs.153937	AA427891	19.92	0.27	74.07	9.00	6.00	3	728.84	Tonsil	Blood	Whole embryo
9810	858163	Hs.78934	AA633811	14.83	0.55	26.60	7.00	6.00	9	301.26	Pooled	Adipose	Aorta
9811	52635	Hs.3757	H29513	16.35	1.00	16.35	5.00	0.00	1	Head and nec	Lymph	Kidney	-
9812	83378	Hs.15285	T58652	64.51	4.70	13.74	8.00	1.00	1	694.72	Liver	Pool	-
9814	450470	Hs.98866	AA677667	16.40	1.00	16.40	10.00	5.00	1	98.57	Pituitary	Prostate	Germ Cell
9817	109863	Hs.29191	T83721	36.74	2.27	16.17	0.00	2.00	16	398.69	CNS	Placenta	Parathyroid
9818	384904	Hs.153924	AA025275	33.88	1.00	33.88	5.00	5.00	16	202.82	Liver	Nose	Adipose
9822	758556	Hs.151242	AA481438	27.41	1.92	144.85	4.00	5.00	11	434.49	Brain	Whole embryo	Kidney
9824	47378	Hs.22265	H11036	13.72	1.20	11.46	1.00	0.00	8	131.57	CNS	Brain	Pool
9832	32150	Hs.22270	R43352	5.81	0.58	10.47	1.00	0.00	11	311.24	Spleen	Heart	LID not found
9833	272229	Hs.114408	N41021	16.18	1.00	16.16	0.00	4.00	12	313.56	Adrenal gland and nec	Testis	Germ Cell
9835	74187	Hs.57860	T45367	15.69	1.00	15.69	2.00	2.00	13	160.56	Eye	Colon	LID not found
9837	761047	Hs.98856	AA446462	26.06	5.19	5.03	1.00	0.00	13	104.17	Pooled	Testis	Forsskin
9846	769959	Hs.75617	AA430540	177.91	2.47	72.05	6.00	3.00	19	308.23	Pituitary	Uterus	Stomach
9850	361807	Hs.51147	W62431	27.54	0.91	30.22	5.00	8.00	10	147.88	Whole embryo	Pituitary	CNS
9851	83508	Hs.4189	T69562	10.88	1.00	10.88	3.00	2.00	2	636.65	Brain	Eye	Parathyroid
9853	198982	Hs.97691	R55732	37.92	1.33	26.55	6.00	0.00	22	153.68	Ignore	Skin	Thyroid
9854	491692	Hs.119129	AA150402	8.10	1.21	6.87	1.00	0.00	20	335.33	Thyroid	Cervix	Lymph
9855	50250	Hs.7154	H17800	5.59	1.00	5.59	2.00	2.00	11	236.57	Brain	Uterus	Breast
9859	47098	Hs.189998	N90763	12.95	0.72	5.86	1.00	0.00	5	661.6	Adipose	Placenta	Germ Cell
9863	47362	Hs.13493	R43701	96.22	0.83	10.65	6.00	0.00	2	388.09	Brain	Germ Cell	Kidney
9867	32489	Hs.100960	N33655	27.74	2.97	30.12	7.00	2.00	5	577.1	Ear	Placenta	Parathyroid
9877	243382	Hs.172865	W72816	43.94	3.57	12.31	1.00	1.00	1	98.68	Brain	LID not found	Other
9878	941759	Hs.82963	AA043996	6.07	0.72	8.39	1.00	0.00	6	21.28	Unilateral cord	Muscle	Uterus
9882	487071	Hs.76199	AA129171	9.62	1.00	9.62	4.00	2.00	5	528.75	Thymus	Head and nec	Liver
9885	566725	Hs.73919	N20335	232.04	27.26	8.51	2.00	0.00	11	417.79	Blood	Cervix	Unilateral cord
9886	264640	Hs.155553	R16195	9.95	1.21	8.23	2.00	0.00	3	117.97	Blood	Stomach	Pooled
9887	877938	Hs.8489	AA468177	65.74	13.11	5.02	1.00	0.00	5	511.76	Nose	Heart	LID not found
9893	40808	Hs.150968	R55706	5.94	0.15	40.63	10.00	0.00	1	582.55	Tonsil	Lymph	Ovary
9895	951126	Hs.16250	AA620556	115.42	10.46	11.03	2.00	1.00	2	675.88	Germ Cell	Lung	Uterus
9896	345176	Hs.11081	W72263	12.13	0.13	92.12	7.00	4.00	10	129.08	Smooth muscle	Thymus	Whole embryo
9897	773157	Hs.16553	AA425382	11.83	1.41	8.38	1.00	0.00	2	226.05	Brain	Omentum	Thyroid
9901	33523	Hs.168547	R43972	7.21	1.07	6.73	2.00	0.00	5	484.14	Small intestine	Bone	Stomach
9902	642933	Hs.107905	AA489329	6.66	1.00	6.66	5.00	3.00	1	101.02	Unilateral cord	Whole embryo	Pituitary
9906	238435	Hs.14574	H84780	27.69	2.33	11.67	2.00	0.00	5	43.64	Cervix	Brain	Pituitary
9910	358990	Hs.110180	W92263	19.90	0.47	42.38	9.00	6.00	19	526.27	Esophagus	Gall bladder	Placenta
9911	780977	Hs.111187	AA429882	68.55	9.39	7.30	1.00	0.00	7				
9913	23588	Hs.60159	R38369	6.07	1.02	7.63	3.00	0.00					
9919	503215	Hs.109733	AA151574	6.39	0.65	9.78	5.00	4.00					
9921	31818	Hs.66187	R41730	24.88	0.41	60.71	9.00	6.00					
9928	610113	Hs.198532	AA168814	66.10	8.91	7.42	1.00	0.00					
9940	286234	Hs.101042	N28962	10.99	1.41	7.56	1.00	0.00					
9942	774249	Hs.43749	AA405571	7.71	0.05	183.02	10.00	6.00					
9943	826555	Hs.5038	AA186348	26.38	2.62	10.07	2.00	0.00					
9945	773276	Hs.6790	AA425320	45.44	6.42	7.08	4.00	0.00					

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10154 345649	Hs.102267	W70343	189.40	2.56	73.85	22.00	4.00	5	490.97	Pooled	Fore skin	Pancreas
10157 376000	Hs.57822	AA040337	6.21	0.63	9.90	1.00	0.00	12	320.06	Pooled	Kidney	Prostate
10159 811032	Hs.71300	AA485422	13.77	1.00	13.77	3.00	0.00	1	210.4	Fore skin	Eye	Heart
10162 272327	Hs.154039	N32198	180.45	7.95	22.71	3.00	1.00	1	684.25	Fore skin	Aorta	Whole embryo
10165 345051	Hs.47558	W72803	13.87	2.20	6.21	0.00	3.00	1	449.84	Fore skin	Brain	Brain
10167 808674	Hs.174170	AA454689	78.24	6.84	11.58	2.00	0.00	5	538.25	Ovary	Lung	Uterus
10168 343738	Hs.34460	W69211	19.17	1.33	14.44	8.00	4.00	5	41.12	Smooth musc	Pancreas	Brain
10169 305538	Hs.44162	N69981	97.80	10.63	5.44	2.00	0.00	5	684.25	Thymus	Skin	Bone
10170 271198	Hs.75772	N30428	31.01	1.97	15.76	5.00	2.00	17	41.12	Neural	Nose	CNS
10172 269342	Hs.24821	N75572	28.22	4.93	5.32	1.00	0.00	2	41.12	Neural	Umbilical cord	Muscle
10175 731957	Hs.78563	AA113881	10.03	1.23	8.16	0.00	1.00	17	684.25	Bone marrow	Ovary	Kidney
10178 770082	Hs.6654	AA430576	25.64	1.85	15.24	5.00	5.00	2	41.12	Esophagus	Small intestine	Synovial membrane
10179 772304	Hs.79172	AA404466	371.56	47.35	7.85	3.00	0.00	11	41.12	Nose	Umbilical cord	Umbilical cord
10182 864718	Hs.180414	AA629567	403.22	37.21	10.84	2.00	0.00	11	41.12	Tonsil	Testis	Brain
10183 757210	Hs.142495	AA443971	20.32	1.00	20.32	2.00	0.00	10	543.35	Brain	LID not found	Other
10186 33500	Hs.106300	R43869	92.81	17.17	5.39	1.00	0.00	2	489.76	Eye	Ear	Stomach
10187 786323	Hs.8110	AA461325	66.87	8.10	8.26	1.00	0.00	10	254.81	Heart	Stomach	Ovary
10190 739109	Hs.119681	AA421518	71.89	8.27	8.69	1.00	0.00	19	449.84	Smooth musc	Skin	Adipose
10193 486591	Hs.171621	AA042990	108.24	5.84	18.71	19.00	1.00	7	684.25	Pooled	Germ cell	Lung
10194 854643	Hs.73987	AA630459	38.61	6.38	5.74	1.00	0.00	1	650.09	Kidney	Pool	Brain
10195 383055	Hs.80951	AA019320	6.52	1.04	6.25	1.00	0.00	6	650.09	Brain	LID not found	Other
10199 481896	Hs.158825	H06243	382.68	53.23	7.19	2.00	0.00	16	650.09	Brain	LID not found	Other
10200 46448	Hs.12359	H10673	8.94	1.32	7.50	2.00	0.00	4	203.3	Brain	Eye	Lung
10205 152453	Hs.26351	R46202	22.18	1.01	22.05	2.00	0.00	12	469.29	Breast	Colon	CNS
10206 58654	Hs.184639	AA130874	26.85	2.21	12.19	5.00	3.00	5	684.25	Bone	CNS	CNS
10212 78412	Hs.10235	T37891	6.80	1.00	6.80	1.00	2.00	16	64.05	Pool	Fore skin	Pancreas
10214 178569	Hs.101813	H49053	10.09	0.77	13.07	7.00	2.00	4	203.3	Liver	Pooled	Brain
10217 878633	Hs.76118	AA970436	158.89	23.36	6.79	3.00	1.00	12	469.29	Small intestine	Lymph	LID not found
10218 264946	Hs.12109	N26062	16.24	1.38	13.64	7.00	1.00	12	469.29	Small intestine	Colon	LID not found
10219 886682	Hs.127810	AA476563	8.44	1.00	8.44	1.00	0.00	2	484.07	Testis	Adrenal gland	Esophagus
10223 742535	Hs.190093	AA400292	38.08	6.21	6.13	3.00	0.00	2	285.88	Parathyroid	Kidney	Heart
10226 882494	Hs.108809	AA676586	50.63	7.66	6.61	3.00	0.00	11	285.88	Stomach	Ear	Whole embryo
10227 450464	Hs.26014	AA682819	11.18	0.13	8.55	2.00	0.00	6	613.3	Thyroid	Brain	LID not found
10229 260336	Hs.74420	H99257	13.09	2.06	8.37	2.00	0.00	X	350.62	Cervix	Lymph node	Neural
10232 46350	Hs.12432	H09769	29.89	4.14	7.22	2.00	0.00	15	181.85	Thyroid	Cervix	Bone
10233 864673	Hs.75683	AA923923	98.73	11.41	8.66	4.00	0.00	10	421.71	Aorta	Small intestine	Bone
10234 85313	Hs.82506	T71686	5.37	1.00	5.37	0.00	2.00	10	421.71	Aorta	Small intestine	Bone
10235 889304	Hs.195851	AA634008	548.67	61.97	8.87	0.00	1.00	20	93.62	Smooth musc	CNS	Eye
10238 80843	Hs.10283	T57803	57.93	2.93	19.78	8.00	3.00	19	93.62	Small intestine	Esophagus	Adipose
10239 255754	Hs.43347	N27741	10.85	3.29	5.72	1.00	0.00	19	27.61	Head and nec	Thymus	Spleen
10243 789292	Hs.82306	AA424624	422.88	28.81	14.68	1.00	1.00	21	245.27	Ignore	Small intestine	Neural
10245 811145	Hs.244	AA465742	53.69	3.69	14.56	4.00	0.00	19	216.31	Breast	Brain	Eye
10246 505481	Hs.111126	AA156461	62.10	2.77	22.44	5.00	0.00	18	347.86	Ignore	Larynx	Liver
10247 877638	Hs.7357	AA468178	42.00	5.48	7.67	5.00	1.00	12	58.23	Nose	CNS	Pooled
10249 45376	Hs.32500	H07928	131.35	4.60	28.55	3.00	2.00	7	18.95	Aorta	Liver	Parathyroid
10257 461759	Hs.77729	AA682386	7.23	0.00	90.97	1.00	0.00	8	643.2	Spleen	Whole embryo	Uterus
10259 322314	Hs.73393	W45148	85.41	13.18	6.48	2.00	0.00	5	368.23	CNS	Ear	Fore skin
10263 72526	Hs.6385	T51630	8.64	0.58	15.16	4.00	0.00	19	242.65	Stomach	Muscle	Testis
10264 48949	Hs.153610	H10079	5.56	0.00	555.84	2.00	0.00	17	440.69	Brain	LID not found	Other
10268 432042	Hs.155172	AA678260	30.83	1.19	25.91	4.00	0.00	1	337.43	Muscle	Brain	Fore skin
10270 889450	Hs.179943	AA880244	1968.54	304.88	6.52	0.00	1.00	1	337.43	Muscle	Brain	Fore skin
10274 28597	Hs.94970	R20641	5.93	0.50	11.74	5.00	5.00	1	337.43	Muscle	Brain	Fore skin
10284 80476	Hs.11694	T84485	6.63	0.51	13.06	2.00	0.00	1	337.43	Muscle	Brain	Fore skin
10284 32483	Hs.167473	R43456	6.48	1.01	8.43	1.00	0.00	1	337.43	Muscle	Brain	Fore skin
10305 33821	Hs.160513	R53428	61.46	11.08	5.58	1.00	0.00	1	337.43	Muscle	Brain	Fore skin
10308 82226	Hs.11910	T68687	67.41	5.81	11.58	10.00	1.00	1	337.43	Muscle	Brain	Fore skin
10313 51391	Hs.26037	H18920	5.03	0.00	502827.81	1.00	0.00	1	337.43	Muscle	Brain	Fore skin

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10323	839579	Hs.167008	AA489813	32.82	0.49	66.39	9.00	6.00	11	245.96	Eye	LID not found	Other
10337	47418	Hs.26041	H11083	25.35	1.71	14.78	2.00	1.00	17	307.17	Brain	Prostate	Tonsil
10341	47761	Hs.31075	H11478	9.13	1.07	8.54	1.00	1.00	1	711.31	CNS	Eye	Uterus
10350	509569	Hs.177534	AA056608	20.88	3.28	6.31	1.00	0.00			Testis	Kidney	Parathyroid
10358	731021	Hs.98338	AA421285	5.67	0.12	46.31	1.00	0.00			Eye	Breast	Pool
10365	50875	Hs.111373	H17020	15.72	2.39	6.83	1.00	0.00	6	569.13	Lymph	Kidney	Heart
10370	126513	Hs.84507	R08748	34.79	0.22	158.31	14.00	0.00			Pooled	Foreskin	Tonsil
10371	416128	Hs.33944	V86002	32.74	2.27	14.45	2.00	0.00	8	100.33	Testis	CNS	LID not found
10375	795655	Hs.37883	AA459336	12.16	2.08	5.86	2.00	0.00	1	611.65	Prostate	Aorta	-
10384	289530	Hs.51233	N59249	87.72	6.40	10.57	2.00	0.00	9	385.81	Uterus	CNS	Germ Cell
10388	491415	Hs.184224	AA150422	15.78	2.83	5.99	2.00	0.00	22	17.69	Pooled	Heart	Lung
10388	277740	Hs.181530	N49589	14.10	2.39	8.14	1.00	0.00			CNS		
10392	366663	Hs.46353	AA026167	9.54	1.51	6.31	1.00	1.00	19	32.6	CNS	LID not found	Other
10394	126681	Hs.190339	R06918	5.72	0.57	10.12	1.00	1.00	6	324.87	Pool	Stomach	Heart
10402	417318	Hs.16872	V89128	28.28	1.13	25.08	10.00	0.00	8	487.66	Thyroid	Spleen	Blood
10411	366436	Hs.34244	AA026388	9.37	1.00	9.37	0.00	2.00	11	373.63	Whole embryo	Spleen	Placenta
10412	280376	Hs.46877	N47113	42.21	6.89	8.04	2.00	0.00			Uterus	Smooth muscle	Adipose
10414	490484	Hs.22971	AA101632	8.28	0.95	8.73	1.00	0.00	2	147.38	Pool	Ovary	Placenta
10422	505064	Hs.23012	AA150896	11.56	1.49	7.76	1.00	0.00	X	136.53	Pool	LID not found	Other
10423	809733	Hs.106131	AA455511	11.28	1.97	5.72	1.00	0.00	11	232.44	Uterus	Pool	LID not found
10425	126763	Hs.206507	R07142	42.71	1.00	42.71	7.00	3.00	18	22.79	Pool	Eye	Thymus
10427	195801	Hs.200346	R89104	73.91	3.09	23.91	3.00	1.00	14	193.9	Nose	Cervix	Germ Cell
10440	289686	Hs.91589	N62077	35.50	4.83	7.36	2.00	1.00	6	440.23	Thyroid	Blood	Tonsil
10450	505508	Hs.188531	AA148980	11.25	1.88	6.77	1.00	0.00			Pooled	Placenta	Pancreas
10453	415231	Hs.20039	V91880	6.58	0.09	73.19	1.00	0.00	2	618.12	Pool	Nose	Cervix
10467	234823	Hs.169036	H77729	7.08	0.16	45.78	6.00	4.00	21	152.56	Pool	Foreskin	Whole embryo
10468	811015	Hs.25647	AA455377	6.43	0.06	148.29	7.00	6.00	6	-8.01	Pool	Uterus	Brain
10472	742132	Hs.833	AA406020	21.64	3.31	8.75	1.00	0.00	4	451.51	Esophagus	Head and neck	Nose
10474	376482	Hs.202968	AA039512	117.38	10.79	10.87	2.00	0.00	17	277.22	Pool	Pancreas	Whole embryo
10475	782478	Hs.107058	AA431755	17.20	2.95	5.83	2.00	0.00	19	464.48	CNS	Lymph	Foreskin
10478	39920	Hs.172789	R53935	31.54	0.28	119.59	7.00	4.00	14	1.92	CNS	Small intestine	
10479	275042	Hs.66881	AA455476	99.78	12.39	8.05	1.00	0.00	8	591.65	Pool	Cervix	Ovary
10480	287687	Hs.154248	R93182	6.12	1.18	6.89	1.00	0.00	11	153.38	Breast	Eye	LID not found
10480	287687	Hs.1513	N59150	110.00	16.77	6.92	1.00	0.00	3	488.53	Marrow	Skin	Ovary
10484	452374	Hs.872	AA700876	5.12	0.80	6.42	1.00	0.00	X	60.82	Blood	Small intestine	Whole embryo
10485	505385	Hs.87607	AA156247	34.65	2.42	14.34	2.00	0.00	4	487.5	Pool	Small intestine	Whole embryo
10488	588915	Hs.2667	AA157813	237.84	21.36	11.11	4.00	4.00	22	63.7	Pool	LID not found	Other
10491	139685	Hs.140880	R63920	59.11	9.00	6.57	2.00	0.00	1	597.17	Parathyroid	Colon	Breast
10492	61373	Hs.167172	H24008	8.94	0.59	12.93	3.00	1.00	11	373.41	Thyroid	CNS	Cervix
10498	755578	Hs.184801	AA419177	60.74	8.83	8.89	5.00	0.00	6	150.84	Testis	Lung	Placenta
10500	769890	Hs.75514	AA403382	83.79	9.94	9.03	6.00	0.00	13	147.72	Pool	Ovary	Prostate
10501	810089	Hs.67778	AA484993	17.49	1.00	17.49	0.00	2.00	2	578.44	Ear	Esophagus	Pancreas
10502	308746	Hs.100285	N83247	21.85	3.59	6.03	1.00	0.00	6	83.47	Thymus	Blood	Lymph
10504	415898	Hs.1503	V88189	20.78	3.93	5.29	1.00	0.00	1	674.22	Thymus	Whole embryo	Tonsil
10507	278687	Hs.107127	N62924	383.38	29.10	13.18	12.00	1.00	1		Thymus	Eye	Foreskin
10508	864301	Hs.172305	AA669758	170.46	12.45	13.69	6.00	3.00			Whole embryo	Uterus	
10511	419328	Hs.125051	V90760	34.54	4.19	8.24	2.00	0.00			Pool	LID not found	Other
10512	344134	Hs.170116	W73780	10.76	0.10	107.63	8.00	6.00	4		Pool	LID not found	Other
10514	503541	Hs.85734	AA133778	9.17	1.61	5.69	1.00	0.00	1		Parathyroid	Colon	Breast
10515	320146	Hs.7499	V04502	13.91	1.00	13.91	7.00	5.00	11		Thyroid	CNS	Cervix
10518	731648	Hs.797	AA412691	8.65	0.00	865372.69	1.00	0.00	6		Testis	Lung	Placenta
10517	810230	Hs.170810	AA464694	11.15	1.00	11.15	0.00	4.00	13		Pool	Ovary	Prostate
10519	244931	Hs.101545	N54540	10.82	1.46	7.30	1.00	0.00	2		Ear	Esophagus	Pancreas
10532	864436	Hs.155398	AA029897	142.88	22.70	8.29	2.00	0.00	6		Thymus	Blood	Lymph
10534	368815	Hs.93688	AA029415	60.45	9.04	6.69	1.00	0.00	1		Thymus	Whole embryo	Tonsil
10538	480925	Hs.85793	AA138612	7.27	1.00	7.27	3.00	5.00			Thymus	Eye	Foreskin
10541	502328	Hs.164587	AA156874	19.78	1.59	12.71	5.00	3.00			Thymus	Eye	Foreskin

Table 3A

10544 381899	Hs 173767	A4001376	15.99	1.00	15.99	7.00	6.00	6	113.16	Cervix	Uterus	Spleen
10546 810218	Hs 95835	A4464688	45.69	3.36	13.62	1.00	1.00	10	274.87	Head and nec	Ovary	Parathyroid
10549 810560	Hs 198440	A4459401	8.17	1.51	5.40	0.00	1.00	2	198.28	Larynx	Pancreas	Muscle
10552 480436	Hs 77637	A4044350	226.16	27.68	8.17	5.00	1.00	18	250.4	Synovial mem	Spleen	Brain
10556 429050	Hs 106671	A4005140	9.20	0.10	91.98	8.00	6.00	7	137.5	Pooled	Pancreas	Germ Cell
10562 864655	Hs 75260	A4628909	138.10	15.32	9.02	1.00	0.00	17	46.48	Cervix	Pooled	Heart
10565 531319	Hs 100655	A4071486	12.10	1.05	11.56	1.00	1.00	3	52.38	Thymus	Brain	Bone
10568 51254	Hs 22309	H18645	10.53	1.82	6.74	3.00	1.00	5	591.35	Umbilical cord	Germ Cell	Bone
10571 46898	Hs 472651	H08818	7.81	1.04	7.51	1.00	0.00	11	57.07	CNS	Adrenal gland	Placenta
10573 740347	Hs 77597	A4626282	19.22	1.30	14.76	1.00	5.00	3	157.88	Lymph node	Umbilical cord	Head and neck
10574 768629	Hs 150540	A4461481	6.97	0.48	15.01	1.00	0.00	7	323.97	Brain	Omentum	Thymus
10576 46173	Hs 5378	H09059	15.28	2.07	7.38	1.00	0.00	20	43.12	Adrenal gland	Eye	Lung
10578 810090	Hs 76686	A4465352	194.96	1.00	194.96	1.00	1.00	3	52.58	CNS	Pooled	Parathyroid
10585 654581	Hs 75356	A4659136	52.74	7.62	6.93	0.00	1.00	11	313.2	Adipose	Cervix	Blood
10586 263014	Hs 77490	H39513	49.89	1.82	27.43	4.00	2.00	14	247.37	Germ Cell	Testis	-
10587 45877	Hs 4302	H05582	6.76	0.40	16.72	4.00	2.00	6	208.08	Parathyroid	Pool	Testis
10590 322148	Hs 2281	H07769	12.80	2.29	5.60	1.00	0.00	7	141.36	Brain	Brain	Uterus
10594 275207	Hs 75852	H56896	29.39	2.18	13.62	19.00	3.00	1	165.67	Synovial mem	Neural	Heart
10595 52128	Hs 183389	H22568	20.79	2.83	9.45	7.00	1.00	8	639.73	Umbilical cord	Aorta	Bone
10596 50900	Hs 18414	H19229	67.37	9.75	6.91	5.00	0.00	1	595.93	Pool	Testis	Prostate
10597 256907	Hs 102484	N30096	313.92	2.38	131.91	21.00	6.00	1	639.73	Umbilical cord	Aorta	Bone
10603 46268	Hs 135177	H06078	5.33	0.89	6.08	3.00	0.00	20	194.06	Brain	Forebrain	Lung
10606 854336	Hs 154136	A4668821	25.42	0.52	50.40	5.00	0.00	10	158.33	CNS	Spleen	Muscle
10607 62225	Hs 7306	T88892	25.33	1.00	25.33	11.00	2.00	17	340.31	Neural	Parathyroid	Stomach
10613 430968	Hs 118410	A4676335	6.00	0.00	595.93	40	2.00	13	32.28	Uterus	Pancreas	Tonil
10615 147050	Hs 196384	R80217	130.10	2.08	62.49	21.00	5.00	2	494.07	Heart	LID not found	Other
10619 22359	Hs 4840	T80096	6.44	1.00	6.44	1.00	1.00	6	148.48	Esophagus	Aorta	Lymph
10620 51991	Hs 108730	H32229	74.03	0.25	294.79	9.00	6.00	2	142.55	Adipose	CNS	Germ Cell
10629 461727	Hs 1870	A4682293	6.34	0.43	14.59	4.00	0.00	4	362.35	Skin	Blood	Pooled
10633 429349	Hs 4758	A4007419	281.57	2.88	87.46	23.00	5.00	10	583.44	Adrenal gland	Liver	Parathyroid
10637 755612	Hs 45339	A4419229	11.98	0.10	119.80	8.00	8.00	5	203.48	Liver	Parathyroid	Spleen
10640 33715	Hs 22605	R44078	17.44	0.00	174.97	60	6.00	9	382.89	Ignore	Lymph node	Neural
10643 47264	Hs 4892	H10713	10.31	0.05	214.59	8.00	0.00	9	382.89	Ignore	Lymph node	Neural
10644 25838	Hs 20528	R37108	24.83	0.84	39.07	8.00	0.00	9	382.89	Ignore	Lymph node	Neural
10647 51921	Hs 7859	H22928	28.84	1.92	15.02	3.00	0.00	9	382.89	Ignore	Lymph node	Neural
10650 33643	Hs 170608	R44005	7.74	1.10	7.01	3.00	0.00	9	382.89	Ignore	Lymph node	Neural
10653 214855	Hs 201645	H72030	11.55	0.00	1154.93	48	0.00	9	382.89	Ignore	Lymph node	Neural
10655 70030	Hs 24169	T48781	14.11	2.61	5.41	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10656 32989	Hs 22629	R44769	21.63	2.80	7.73	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10660 34488	Hs 101188	R44214	82.53	14.17	5.93	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10661 52338	Hs 26014	H23277	5.46	0.27	20.41	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10662 346917	Hs 56561	W79920	7.25	0.64	11.29	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10666 561916	Hs 6753	A4085876	44.31	2.08	21.33	17.00	0.00	9	382.89	Ignore	Lymph node	Neural
10672 250699	Hs 182865	H93969	57.50	11.42	5.04	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10673 730677	Hs 169836	A4411771	24.24	3.71	6.54	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10674 842760	Hs 131278	A4468182	28.16	2.24	12.55	8.00	0.00	9	382.89	Ignore	Lymph node	Neural
10679 77730	Hs 161610	T55871	14.62	2.25	6.49	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10681 796146	Hs 7122	A4460375	6.23	0.88	9.34	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10682 730352	Hs 21323	A4469550	16.02	1.83	6.75	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10687 529147	Hs 67052	A4064946	97.63	16.40	6.97	2.00	0.00	9	382.89	Ignore	Lymph node	Neural
10689 840683	Hs 7149	A4468062	7.21	1.00	7.21	0.00	1.00	9	382.89	Ignore	Lymph node	Neural
10691 565225	Hs 5817	A4142922	11.85	1.66	7.18	0.00	1.00	9	382.89	Ignore	Lymph node	Neural
10697 76041	Hs 71998	T61343	58.05	2.61	22.22	9.00	5.00	9	382.89	Ignore	Lymph node	Neural
10698 730018	Hs 5169	A4416876	60.84	8.89	6.66	1.00	0.00	9	382.89	Ignore	Lymph node	Neural
10701 798878	Hs 9625	A4463188	51.72	8.41	6.15	2.00	0.00	9	382.89	Ignore	Lymph node	Neural
10707 270343	Hs 44424	N33041	15.04	0.56	26.98	9.00	0.00	9	382.89	Ignore	Lymph node	Neural
10708 46890	Hs 101689	H10356	22.52	0.00	2251787.57	13.00	1.00	9	382.89	Ignore	Lymph node	Neural

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Table 3A

10945 415554	Hs.198477	V80637	22.08	2.72	8.12	2.00	0.00	1	Placenta	Testis	Stomach
10949 770059	Hs.75578	A4427561	73.04	2.04	35.74	5.00	5.00	11	73.65 Smooth musc Skin	Head and nec Esophagus	Stomach
10954 377275	Hs.82237	A4055466	5.04	0.96	5.26	1.00	0.00		387.92 Larynx	UD not found Other	Breast
10959 796408	Hs.180439	T58543	5.89	1.12	5.25	1.00	0.00		Ovary	Tonsil	
10959 295857	Hs.50282	N73469	32.35	5.82	5.56	2.00	0.00		Eye		
10959 70093	Hs.182072	T51211	6.44	0.68	9.42	1.00	0.00		15.13 Skin	CNS	Prostate
10961 435611	Hs.60213	AA703187	17.31	0.75	23.04	3.00	0.00		140.38 Blood	Liver	Prostate
10966 764483	Hs.180433	N86132	69.65	13.69	5.08	1.00	0.00	18	49.6 Adrenal gland	Thyroid	Stomach
10969 787453	Hs.218689	H51546	7.15	0.11	66.28	8.00	8.00	X	Neural	Colon	Uterus
10969 787453	Hs.218689	H51546	7.15	0.11	66.28	8.00	8.00	1	Eye	Esophagus	Pancreas
10971 641179	Hs.75584	AA487064	41.05	2.31	17.81	2.00	2.00		410.63	Lung	Pool
10973 352279	Hs.334	AA501222	6.94	1.22	7.35	3.00	0.00		Brain	Pool	Muscle
10979 897950	Hs.105409	AA501222	13.23	1.83	8.13	4.00	0.00		Small intestine	Colon	Gall bladder
10985 384088	Hs.5333	AA702544	13.11	1.57	8.33	1.00	0.00	3	30.83 Synovial mem Cervix	Tonsil	Uterus
10987 825170	Hs.5119	AA504190	26.69	0.89	26.84	3.00	0.00		Synovial mem Fore skin	Uterus	Umbilical cord Bone marrow
10991 57176	Hs.27453	H24206	9.41	0.11	87.75	2.00	0.00	11	39.9	Nose	Fore skin
10993 268123	Hs.76415	N73625	7.74	0.72	10.81	1.00	0.00	19	185.79 CNS	LID not found Other	
10995 384078	Hs.108878	AA702541	37.15	4.00	9.30	1.00	0.00	8	247 Brain	Thyroid	Heart
10997 566685	Hs.5302	AA130579	7.70	0.59	11.18	1.00	0.00		Nose	Fore skin	Bone
11002 429234	Hs.171957	AA007299	16.09	3.00	5.36	1.00	0.00	16	21.67 Larynx	Esophagus	Gall bladder
11003 266312	Hs.84599	N26536	28.20	5.51	5.12	1.00	0.00	9	416.74 Cervix	Eye	Brain
11015 781007	Hs.76084	AA446013	150.33	1.00	150.33	4.00	2.00	12	228.28 Thymus	Skin	Larynx
11017 260897	Hs.108844	N47443	7.45	1.00	7.45	1.00	1.00	20	92.9 Brain	LID not found Other	
11023 40139	Hs.205863	R63954	162.29	17.98	9.03	2.00	0.00	11	371.29 Adrenal gland	CNS	Uterus
11027 825312	Hs.73851	AA504465	199.05	30.02	5.63	1.00	0.00		Head and nec Ovary	Adrenal gland	
11028 78448	Hs.10659	T59948	17.92	1.00	17.92	2.00	1.00		Synovial mem Breast	Eye	
11029 772425	Hs.418	AA405569	45.05	2.76	16.29	10.00	4.00	2	433.07 Thyroid	Blood	Ear
11030 203003	Hs.9235	H54417	104.55	18.02	5.80	2.00	0.00	2	136.63 Parathyroid	Placenta	Nose
11031 32228	Hs.6580	R42813	177.53	34.81	5.10	1.00	0.00	8	151.38 Brain	LID not found Other	
11035 809876	Hs.89399	AA485126	384.89	56.68	6.19	1.00	0.00	7	52.23	Testis	LID not found Other
11044 24254	Hs.13358	R37959	7.83	0.39	18.88	4.00	0.00		Gall bladder	Thyroid	Parathyroid
11048 808680	Hs.184544	AA189159	172.32	32.67	5.26	1.00	0.00	7	117.45 Testis	LID not found Other	
11050 811000	Hs.78339	AA485353	334.76	4.47	74.89	2.00	1.00	18	207.6 Umbilical cord	Whole embryo	CNS
11054 1056214	Hs.116556	AA621026	7.49	0.09	117.95	1.00	0.00	X	282.2 CNS	Pancreas	Bone
11057 47080	Hs.26118	H10397	22.50	2.32	9.72	3.00	0.00	1	711.38 Breast	Lung	Germ Cell
11058 868187	Hs.8136	AA680300	36.79	5.28	6.99	0.00	1.00	11	205.99 Liver	Gall bladder	Prostate
11060 25029	Hs.203653	R37815	30.41	5.67	5.36	1.00	0.00	5	-4.6 Brain	LID not found Other	
11062 742630	Hs.97803	AA400393	20.16	3.73	5.41	2.00	0.00	21	242.42 Adrenal gland	Lymph	Parathyroid
11074 755581	Hs.202884	AA419143	89.80	14.02	18.13	1.00	0.00	9	284.54 Gall bladder	Adrenal gland	CNS
11085 50562	Hs.31446	H16793	17.67	0.87	10.40	1.00	0.00	12	45.2 Ignores	Pooled	Pancreas
11090 510715	Hs.67397	AA173290	9.02	0.87	10.40	1.00	0.00		Blood	Eye	Aorta
11091 786767	Hs.26799	AA460732	11.45	0.00	1145385.04	2.00	1.00		Whole embryo	Spleen	Bone
11098 897924	Hs.5472	AA568808	18.75	3.57	5.25	1.00	0.00	12	101.74 Synovial mem	Fore skin	CNS
11097 40364	Hs.26244	R54822	11.48	0.07	175.64	2.00	0.00	11	169.1 Cervix	Thymus	Brain
11100 85800	Hs.18910	T72087	13.56	1.48	9.14	1.00	0.00	5	639.6 Blood	Adrenal gland	Whole embryo
11101 50786	Hs.203399	H16632	6.66	0.94	7.35	2.00	0.00		272.22 Pool	LID not found Other	
11102 60404	Hs.0503	T64469	131.17	9.71	13.51	1.00	0.00				
11104 822667	Hs.173138	AA211448	34.41	5.91	5.92	1.00	0.00				
11112 505224	Hs.5558	AA142919	10.29	1.41	7.30	1.00	0.00				
11113 30464	Hs.28322	H17616	8.58	1.00	8.58	0.00	1.00				
11114 302632	Hs.155568	N90281	5.04	1.00	5.04	1.00	3.00				
11122 526845	Hs.109863	AA113291	12.16	1.00	12.16	1.00	1.00				
11123 731121	Hs.111980	AA417307	14.17	2.82	5.03	1.00	0.00				
11125 51255	Hs.104537	H18646	30.37	1.51	20.15	0.00	2.00				
11127 595078	Hs.53631	AA164819	50.61	3.99	13.71	2.00	0.00				
11130 838149	Hs.151031	AA451935	103.88	20.49	5.07	1.00	0.00				
11138 41123	Hs.57100	R36848	30.48	5.62	5.42	1.00	0.00				
11139 195274	Hs.177384	R92011	34.01	1.84	20.71	2.00	0.00				

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11140	260843	HS.40730	N47522	0.66	0.66	7.76	1.00	0.00		CNS	Prostate	Kidney
11143	346966	HS.38173	W64295	13.65	0.63	14.82	4.00	0.00		CNS	Heart	Lung
11144	344036	HS.48523	W70259	23.68	1.00	23.68	8.00	1.00		CNS	Parathyroid	Heart
11147	427625	HS.34550	AA002153	6.44	0.63	9.45	2.00	1.00	5	579.17	Ovary	LID not found
11151	762258	HS.38178	AA431741	28.46	0.43	6.42	1.00	0.00		Head and nec	Testis	Germ Cell
11152	268846	HS.48376	N82595	6.59	1.17	7.32	1.00	0.00	13	130.76	Small intestine	LID not found
11154	127230	HS.187463	R08184	12.07	1.77	6.82	0.00	1.00		CNS		
11160	364436	HS.171463	AA022866	31.11	3.23	9.63	3.00	1.00		Stomach	CNS	Eye
11164	810753	HS.169425	AA457737	57.72	7.08	8.18	2.00	0.00	6	147.06	Bone marrow	Nose
11176	480178	HS.48597	AA121285	30.24	4.76	6.36	1.00	0.00	4	494.19	Uterus	Lymph
11183	294138	HS.129029	N85594	35.39	2.27	16.12	2.00	0.00	2	566.56	Pool	LID not found Other
11186	415535	HS.191934	W80635	21.32	1.96	10.99	5.00	0.00		Pool		
11188	261681	HS.151472	N48057	155.69	25.12	6.19	1.00	0.00		CNS	Colon	Heart
11194	415204	HS.203351	W64695	172.21	0.45	385.02	19.00	0.00		Pool	LID not found Other	
11198	258761	HS.23495	N30185	16.49	2.91	5.66	1.00	0.00	7	442.17	CNS	Tonsil
11200	276875	HS.139181	N83034	121.50	20.29	5.99	2.00	0.00	17	401.78	Placenta	Ovary
11202	127458	HS.47788	R00769	56.91	3.84	14.83	12.00	0.00		Forebrain	Forebrain	Uterus
11203	762277	HS.34665	AA431749	31.71	4.47	7.09	4.00	1.00	6	482.53	Parathyroid	Pool
11210	307740	HS.20255	N92947	61.18	4.79	12.77	8.00	0.00	2	508.52	Tonsil	Lung
11223	429642	HS.38449	AA011639	14.14	0.80	17.71	6.00	0.00	2	597.89	Pool	LID not found Other
11231	234004	HS.187991	H66150	29.90	3.29	9.09	4.00	1.00	5	528.75	Ear	Small intestine
11234	196570	HS.65941	R91577	44.54	8.57	5.20	1.00	0.00	19	91.65	Eye	
11236	773330	HS.82276	AA425450	27.70	1.66	16.67	2.00	0.00	7	94.72	Lymph	CNS
11238	211227	HS.182169	H67680	102.51	11.94	6.59	2.00	0.00		Bone	Brain	Pool
11242	204740	HS.116653	H57305	23.66	1.00	23.66	8.00	0.00	5	343.84	Thyroid	Forebrain
11244	769716	HS.9002	AA428860	8.46	1.11	7.65	1.00	0.00	22	80.96	Ignore	Pool
11251	144949	HS.26748	R78530	159.81	7.41	21.53	13.00	1.00	18	473.07	Marrow	Synovial membrane
11260	83444	HS.992	T85668	11.87	0.31	38.54	8.00	6.00	14	175.55	Liver	LID not found
11276	433567	HS.105608	AA701652	32.65	1.00	32.65	16.00	6.00		522.77	Forebrain	Blood
11283	488584	HS.28794	AA044814	11.82	1.00	11.82	5.00	5.00	10			
11287	416154	HS.140571	W65927	74.76	6.53	6.77	2.00	0.00		Pool		
11288	322564	HS.90028	AA069372	41.81	2.18	19.21	18.00	0.00	4	456.98	Adrenal gland	Whole embryo
11291	309484	HS.28938	N95762	36.22	6.73	5.36	1.00	0.00		Neural	Adrenal gland	Umbilical cord
11292	154720	HS.153435	R55220	8.43	0.30	21.65	8.00	6.00	20	68.37	CNS	CNS
11299	277208	HS.25846	N40959	24.39	4.56	5.31	1.00	0.00	3	251.52	Pool	LID not found Other
11301	415630	HS.174944	W64750	20.12	3.79	5.31	0.00	1.00	X	Adrenal gland	Gall bladder	
11303	244012	HS.108029	N38767	37.49	0.55	68.16	8.00	6.00	12	252.15	Nose	Adrenal gland
11304	85541	HS.181015	T72202	18.68	2.63	7.11	0.00	1.00		Whole embryo	Germ Cell	Ovary
11308	795502	HS.368	AA443998	25.59	4.33	5.91	2.00	0.00	5	345.44	Pool	LID not found Other
11309	201172	HS.205030	AA634103	15.17	2.33	6.50	2.00	0.00	14	123.72	Lymph node	Thymus
11328	868368	HS.75968	R66467	15.17	2.33	6.50	0.00	2.00	5	522.48	Pool	Testis
11334	415102	HS.656	W85001	10.17	1.71	5.94	1.00	0.00	2	690.17	Aorta	Heart
11335	43942	HS.7908	H28268	9.58	0.86	10.91	3.00	1.00	7	423.81	Stomach	Lymph
11339	52960	HS.4047	H28604	12.17	1.50	7.65	1.00	0.00	7	184.17	Head and nec	Adrenal gland
11342	858292	HS.184236	AA633993	122.92	7.60	16.16	7.00	1.00	13	135.23	Liver	Pool
11343	78144	HS.153545	T61647	7.04	0.24	53.19	10.00	1.00	8	118.63	CNS	Parathyroid
11346	586868	HS.77100	AA133566	12.61	6.44	20.41	8.00	5.00	7	546.17		Adrenal gland
11350	377481	HS.74034	AA055635	131.51	6.44	9.06	14.00	1.00	5	284.54	Neural	Gall bladder
11358	345538	HS.78056	W73874	83.02	9.14	9.06	6.00	1.00	5	527.16	Neural	Brain
11363	50114	HS.187399	H16743	9.93	1.66	5.91	1.00	0.00		Adipose	Tonsil	Brain
11364	25636	HS.182028	R39098	47.73	7.24	6.59	1.00	0.00	11	309.33	Lymph	Gall bladder
11368	845355	HS.10029	AA644088	16.96	0.55	30.84	8.00	8.00	4	488.82	CNS	Brain
11367	52339	HS.8037	H23278	45.96	1.00	45.96	21.00	3.00	4	450.37	Stomach	Pancreas
11370	323238	HS.769	W42723	276.15	2.97	92.89	21.00	2.00	16	168.65		Heart
11371	49594	HS.194478	H15273	8.65	0.00	865216.18	4.00	0.00	4	613.42	Parathyroid	Aorta
11372	344432	HS.81874	W73474	38.81	5.66	6.86	0.00	1.00		Brain	Pool	LID not found
11375	41077	HS.8038	R56607	5.37	0.00	535688.93	1.00	0.00				

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11376 31022	Hs.22672	R44507	63.82	9.88	6.46	2.00	0.00	4	670.02 Brain	LID not found Other
11378 34140	Hs.79381	R44739	17.06	1.33	11.12	0.00	2.00	2	543.41 Thyroid	Whole embryo
11379 23716	Hs.106159	R37083	71.72	6.84	10.34	2.00	0.00	16	167.36 Thymus	Whole embryo
11381 345935	Hs.198008	W72201	27.65	1.00	27.65	13.00	1.00	15	219.74	Synovial mem
11385 487820	Hs.76722	AA043306	12.59	0.19	65.48	9.00	6.00	8	249.17 Uterus	Muscle
11394 759173	Hs.164084	AA460332	14.30	0.38	37.85	9.00	8.00	5	567.56 Blood	CNS
11398 745402	Hs.144477	AA825758	165.96	30.64	5.42	1.00	0.00	1	744.65 Adipose	Aorta
11399 83180	Hs.180633	T68169	37.47	1.00	37.47	2.00	2.00	1	330.82 Cervix	Stomach
11401 251938	Hs.108802	H97488	47.93	3.26	14.69	2.00	0.00	17	236.77 Pooled	Brain
11404 51460	Hs.22587	H20847	26.65	3.17	8.39	1.00	0.00	1	392.77 Muscle	Germ Cell
11405 124375	Hs.06218	RD1941	16.06	1.09	14.78	5.00	0.00	9	101.85 Liver	Bone
11408 744417	Hs.12068	AA621218	5.46	0.10	64.60	5.00	2.00	17	384.02 Brain	Muscle
11407 85592	Hs.8125	T72258	24.58	2.94	8.48	2.00	0.00	12	45.37 Lymph	Whole embryo
11408 46395	Hs.22709	H09774	24.95	1.89	13.23	4.00	0.00	11	147.15 Thymus	Parathyroid
11411 78895	Hs.5151	T61866	161.96	21.35	7.59	1.00	0.00	15	427.01	Pancreas
11415 65080	Hs.8195	T74888	74.21	5.93	12.52	2.00	1.00	12	623.42 Brain	LID not found Other
11416 50566	Hs.18786	H18786	40.33	4.62	8.74	2.00	0.00	4	254.88 Parathyroid	Synovial mem
11420 49172	Hs.21017	H15522	6.62	1.10	6.03	1.00	0.00	11	307.17 Synovial mem	Bone
11421 884953	Hs.8372	AA828862	51.30	0.73	68.83	0.00	1.00	17	75.41 Marrow	Prostate
11424 51284	Hs.124023	H18913	8.88	1.00	8.88	9.00	5.00	17	356.17 Small intestine	Forebrain
11439 627277	Hs.25732	AA191483	75.08	11.35	8.81	5.00	0.00	1	597.96 Forebrain	Smooth muscle
11450 509479	Hs.63288	AA056395	107.83	14.74	7.32	1.00	1.00	8	294.48 Eye	Umbilical cord
11457 40537	Hs.75264	R53059	5.68	0.95	5.99	1.00	0.00	16	164	Pool
11459 842839	Hs.109354	AA468284	98.10	15.51	6.33	2.00	0.00	3	135.2 Larynx	Esophagus
11461 67769	Hs.24040	T49657	83.80	0.53	156.93	9.00	6.00	1	423.87 Ear	Germ Cell
11464 63417	Hs.167976	AA457202	14.07	2.15	6.54	1.00	0.00	15	285.76 Pancreas	Forebrain
11468 784165	Hs.204501	AA432108	42.93	7.84	5.46	1.00	0.00	3	120.51 Lymph node	Eye
11467 585939	Hs.194691	AA121808	7.90	0.76	10.45	2.00	0.00	5	75.41	Lung
11469 68637	Hs.134478	T49819	9.03	1.28	7.04	1.00	0.00	10	152.58	Kidney
11475 502585	Hs.21094	AA156821	68.78	7.92	8.81	5.00	0.00	14	135.2 Larynx	CNS
11476 261539	Hs.10487	N72879	19.37	2.84	8.83	1.00	0.00	1	423.87 Ear	Germ Cell
11477 70384	Hs.100425	T54474	26.36	0.28	102.74	8.00	2.00	1	285.76 Pancreas	Forebrain
11481 70749	Hs.76014	T47312	16.95	1.00	18.95	3.00	5.00	1	120.51 Lymph node	Forebrain
11488 728929	Hs.6169	AA412184	61.45	9.04	5.69	2.00	2.00	1	75.41	Nose
11495 252453	Hs.173938	H87144	13.55	1.22	11.16	4.00	2.00	21	152.58	Esophagus
11497 72054	Hs.76173	T52363	5.58	0.00	555704.54	10.00	0.00	14	135.2 Larynx	Eye
11502 587982	Hs.71331	AA130596	31.72	5.29	5.89	1.00	0.00	12	423.87 Ear	Pooled
11506 511847	Hs.17377	AA128947	83.09	10.47	7.94	6.00	0.00	15	285.76 Pancreas	Lymph
11509 840783	Hs.298933	AA113166	13.77	0.10	137.73	8.00	6.00	3	120.51 Lymph node	Forebrain
11522 342211	Hs.103857	AA480692	17.02	2.44	6.98	1.00	0.00	15	423.87 Ear	Uterus
11524 265843	Hs.42405	NZ2776	6.64	1.00	6.06	1.00	0.00	3	120.51 Lymph node	Forebrain
11526 121136	Hs.35453	T98924	17.78	1.75	10.16	6.00	6.00	14	132.76 Forebrain	LID not found Other
11540 268985	Hs.42414	H80966	5.17	0.50	10.38	1.00	0.00	8	31.24 Forebrain	Prostate
11546 503843	Hs.18669	AA131694	5.73	1.00	6.73	0.00	1.00	11	44.65 Forebrain	LID not found Other
11547 190556	Hs.26518	AA100696	16.54	0.70	23.52	8.00	6.00	X	298.39 Uterus	Blood
11554 429353	Hs.136777	AA007522	34.31	2.93	11.70	2.00	0.00	11	22.83 Adipose	Heart
11567 810901	Hs.153716	AA459293	22.68	3.68	6.16	0.00	1.00	14	280.52	Forebrain
11571 505076	Hs.203358	AA149827	55.08	0.69	55.48	21.00	5.00	10	313.83 Aorta	Whole embryo
11575 337071	Hs.30483	W93482	5.80	0.75	7.72	1.00	0.00	1	51.33 Adrenal gland	Synovial mem
11578 489600	Hs.15780	AA098357	14.91	0.78	19.19	7.00	5.00	1	313.83 Aorta	Uterus
11591 256947	Hs.30643	N30117	19.00	2.89	6.57	3.00	4.00	6	602.99 Stomach	Whole embryo
11606 426371	Hs.18160	AA004380	21.60	0.00	2169483.73	10.00	1.00	3	336.87 Esophagus	Umbilical cord
11610 782463	Hs.173374	AA431438	369.29	22.23	16.61	16.00	1.00	3	245.37 Nose	Forebrain
11619 285097	Hs.192853	N89044	524.79	61.58	8.52	2.00	0.00	21	245.37 Nose	Neural

Table 3A

11622 258033	Hs.105061	N30316	6.26	0.96	5.50	3.00	5.00	10	248.3	Tonsil	Placenta	Pool
11623 810621	Hs.105061	AA64744	6.05	0.89	8.71	5.00	4.00			Neural	Umbilical cord	Tonsil
11625 345824	Hs.126906	W70313	12.81	2.24	5.71	1.00	0.00	19	280.22	Heart	Tonsil	Lung
11626 489495	Hs.42633	A0206138	60.78	3.01	20.23	4.00	1.00					
11630 293438	Hs.179925	N68864	541.51	11.67	46.39	3.00	1.00			Forebrain	Colon	Testis
11636 261174	Hs.130557	H92355	8.67	0.15	47.31	2.00	0.00			Muscle	Heart	Lung
11637 344126	Hs.56330	W73763	5.30	0.00	529739.91	1.00	1.00	1	545.68	Lymph node	Head and nec	Small intestine
11640 756595	Hs.119301	AA444051	21.04	0.34	61.55	9.00	6.00	1	538.82	Colon	Lung	Tonsil
11643 302221	Hs.199851	N77826	20.48	2.40	8.53	3.00	5.00			Germ Cell	Uterus	
11649 489047	Hs.55087	AA041180	5.14	0.82	8.30	1.00	0.00	2	211.67	Aorta	Lung	CNS
11650 378551	Hs.42684	AA041478	11.50	0.00	1149705.34	13.00	0.00			Ignore	Ear	Forebrain
11654 323074	Hs.92280	W42451	21.40	3.46	8.19	1.00	0.00			Larynx	Forebrain	Brain
11655 298495	Hs.5638	N70212	100.63	14.35	7.01	3.00	0.00	11	271.39	Larynx	Forebrain	CNS
11656 278053	Hs.109694	N63476	27.53	0.00	2753248.41	14.00	0.00	12	315.8	Head and nec	Thymus	CNS
11658 487783	Hs.30250	AA043501	18.04	0.58	31.13	4.00	4.00	18	464.35	Parathyroid	Forebrain	Lung
11670 365826	Hs.65029	AA025819	49.54	1.00	49.54	6.00	5.00	9	279.84	Pooled	Bone	Aorta
11677 347661	Hs.58419	W61546	13.56	0.75	18.18	10.00	8.00	3	356.38	Gall bladder	Stomach	Aorta
11678 810772	Hs.168894	AA481745	7.13	0.33	21.69	6.00	3.00			Pooled	Brain	Pancreas
11680 870590	Hs.170779	AA683077	270.48	1.00	270.46	9.00	6.00	5	128.65	Marrow	Skin	Lymph node
11681 308928	Hs.55144	N59435	42.59	2.77	15.39	16.00	1.00				Prostate	Brain
11684 282108	Hs.42322	N51489	42.44	3.04	13.94	5.00	1.00	9	346.22			
11686 428124	Hs.175476	AA020091	11.68	1.80	6.49	1.00	0.00			Pool	LID not found	Other
11689 795841	Hs.55148	AA461524	8.22	0.55	14.95	7.00	6.00			Stomach	Ovary	Lymph
11690 278938	Hs.205651	N68844	66.58	13.05	5.10	1.00	0.00	X	245.06			
11695 289162	Hs.204213	N75473	12.15	0.26	47.27	6.00	0.00			Synovial mem	Head and nec	Spleen
11696 624627	Hs.76319	AA187351	108.98	6.85	15.62	11.00	0.00	2	39.81	Cervix	Adrenal gland	Lymph
11700 268483	Hs.61979	N22664	209.20	33.66	6.22	1.00	0.00	22	114.01	Small intestine	Peripheral nec	Smooth muscle
11702 782576	Hs.92774	AA447514	22.42	1.57	14.28	11.00	3.00			CNS	Testis	Uterus
11704 415851	Hs.8638	W68282	27.06	3.16	8.57	1.00	0.00	2	508.83	Larynx	Adipose	Stomach
11706 323989	Hs.82894	W46439	12.16	2.38	5.10	1.00	0.00	13	320.82		Tonsil	Pool
11721 744010	Hs.62601	AA629033	27.24	5.28	5.16	1.00	0.00	12	345.04	Bone	Tonsil	Whole embryo
11725 415970	Hs.110506	W68216	40.57	6.00	6.77	6.00	2.00	19	242.65	Stomach	Blood	Germ Cell
11726 811588	Hs.196621	AA176957	5.14	0.79	6.46	3.00	5.00	2	504.23	Muscle	Ear	Whole embryo
11731 814353	Hs.96	AA458630	28.89	3.58	8.34	1.00	1.00	18	398.44	Blood	Tonsil	Pancreas
11734 840474	Hs.202788	AA488971	9.99	1.00	8.99	4.00	1.00			Larynx	Adipose	Aorta
11737 277423	Hs.21355	N34513	14.93	2.14	6.99	5.00	1.00	13	112.37	Ear	CNS	Whole embryo
11738 844652	Hs.172772	AA630017	78.38	12.28	6.46	2.00	0.00	13	70.29	Epiglottis	Larynx	Skin
11740 78148	Hs.177781	T61649	117.87	21.42	5.51	2.00	0.00	6	620.93	Gall bladder	Bone marrow	Head and neck
11741 100185	Hs.2132	H13623	52.23	6.94	7.53	4.00	1.00	12	69.93	Adipose	Aorta	Colon
11742 103185	Hs.11850	AA509876	8.81	0.72	12.20	3.00	5.00			Neural	Testis	Germ Cell
11747 66899	Hs.16886	T67128	12.71	1.76	7.16	1.00	0.00	8	84.05	Placenta	Parathyroid	Pool
11748 78921	Hs.10760	T60462	14.84	1.75	8.38	3.00	0.00	9	304.56	Aorta	Stomach	Uterus
11750 270505	Hs.2389	N33214	34.97	0.55	83.58	9.00	6.00			Larynx	Pooled	Umbilical cord
11751 68894	Hs.190741	T53503	59.43	1.00	59.43	2.00	3.00			Forebrain		Whole embryo
11753 280154	Hs.81289	N47008	70.14	1.22	57.33	8.00	2.00	6	610.78	Pooled	Aorta	CNS
11754 384081	Hs.8141	AA702548	13.51	0.89	15.15	8.00	6.00			Liver	Cervix	Placenta
11756 78064	Hs.10762	T61351	5.84	1.00	5.84	1.00	1.00			Smooth muscle	Germ Cell	Uterus
11757 340657	Hs.25195	W56771	22.51	0.32	71.12	11.00	2.00	1	637.9	Pancreas	Skin	Germ Cell
11758 460403	Hs.54451	AA877534	172.40	0.97	177.73	5.00	2.00			Smooth muscle	Nose	Forebrain
11759 731002	Hs.168524	AA418864	27.26	1.60	17.01	3.00	0.00	11	373.42	Liver	Spleen	Gall bladder
11763 200263	Hs.93194	R97710	15.77	0.88	17.85	12.00	2.00			Liver	Aorta	Germ Cell
11765 435573	Hs.144584	AA701655	33.23	5.27	6.30	1.00	0.00			306.36	Skin	Cervix
11766 471664	Hs.128702	AA035310	8.94	1.17	7.63	1.00	0.00	17		84.9	Gall bladder	Umbilical cord
11775 45327	Hs.174740	H08548	217.64	10.02	21.73	18.00	0.00	3		285.03	Umbilical cord	Uterus
11776 46180	Hs.171485	H09105	27.34	0.79	34.51	7.00	0.00					Breast
11777 624577	Hs.45180	AA167340	26.68	0.54	49.20	9.00	6.00	11				

Table 3A

11762 51406	Hs.202659	H18950	10.34	1.64	6.30	1.00	0.00	20	251.08 Kidney	CNS	Blood
11787 85643	Hs.75599	T62050	20.77	3.17	6.55	2.00	0.00	1	625.71 Liver	Pool	Spleen
11794 590500	Hs.169602	AA157261	15.01	0.85	17.72	6.00	6.00	17	492.17 Thyroid	Spleen	Synovial membrane
11797 487115	Hs.203502	AA045326	97.97	7.42	13.21	0.00	3.00	20	246.09		
11798 203732	Hs.2659	H53349	15.19	1.39	10.94	1.00	0.00	7	436.75 Nose	Liver	Germ Cell
11802 148958	Hs.100302	R82176	14.07	2.41	5.85	1.00	0.00		Heart	Aorta	Placenta
11803 769811	Hs.76398	AA430524	172.68	1.00	172.68	2.00	2.00	17	404.02	Epididymis	Pancreas
11805 85938	Hs.5120	AA644679	310.48	25.61	12.12	1.00	0.00		Larynx	Head and neck	
11807 50703	Hs.30002	H17411	5.28	1.00	5.28	2.00	1.00	9	391.77		
11811 48499	Hs.107513	H15549	25.33	1.45	17.47	3.00	0.00		Muscle	Whole embryo	Kidney
11814 731014	Hs.24379	AA410685	84.03	14.49	5.80	2.00	0.00	17	53.59 Foreskin	Pool	Placenta
11815 22228	Hs.13222	T87224	10.63	2.04	5.23	0.00	1.00		Kidney	Brain	Pool
11820 26387	Hs.21151	R39804	6.33	0.17	36.92	3.00	0.00		Brain	LID not found	Other
11824 723975	Hs.5734	AA418940	30.69	7.31	5.29	1.00	0.00	10	471.4 Thymus	Foreskin	Adipose
11828 32050	Hs.21360	R41972	11.49	1.50	7.68	1.00	0.00	2	355.54 Smooth musc	Brain	Aorta
11828 91972	Hs.153708	H20839	6.28	0.60	8.84	1.00	0.00	11	273.9 Brain	Prostate	Colon
11835 743146	Hs.16281	AA407308	18.50	3.39	5.45	2.00	0.00	18	81.84 Pool	Aorta	Whole embryo
11838 335504	Hs.110439	AA487539	236.99	32.85	7.27	2.00	0.00	10	451.22 Larynx	Adrenal gland	Thyroid
11839 7518	Hs.4311	H11320	145.54	29.11	5.00	1.00	0.00	19	208.68 Smooth musc	Unibical cord	Bone
11842 982802	Hs.194461	AA158244	11.50	0.55	20.90	9.00	6.00	18	27.41 Pancreas	Uterus	Heart
11849 40880	Hs.26492	R56034	8.09	1.00	6.09	2.00	0.00		Thymus	Skin	Brain
11854 742541	Hs.131220	AA400013	7.81	0.29	26.79	1.00	0.00		Testis	Pool	LID not found
11859 49639	Hs.131410	H29285	13.95	0.51	27.15	7.00	4.00	6	548.42 Testis	Brain	LID not found
11871 625234	Hs.54878	AA181085	50.64	3.56	12.79	3.00	0.00	22	134.7 Ear	Adrenal gland	Unibical cord
11876 13611	Hs.27604	R44077	21.43	3.11	6.89	5.00	0.00	10	458.26 Blood	Foreskin	Brain
11883 47530	Hs.108486	H11376	21.70	2.99	7.25	4.00	0.00		Kidney	Brain	Whole embryo
11890 10490033	Hs.86368	AA176875	20.84	1.88	11.10	2.00	0.00				
11888 950709	Hs.182255	AA608593	74.13	11.20	6.62	1.00	0.00	22	127.67 Small intestine	Pool	Synovial membrane
11894 977641	Hs.114911	AA48185	228.58	4.23	54.28	9.00	5.00	16	Whole embryo	Eye	Brain
11902 977641	Hs.103975	AA34068	90.36	12.10	7.47	1.00	0.00		446.98 Ear	CNS	Cervix
11911 210803	Hs.200350	H67707	125.14	8.83	14.17	2.00	0.00		Placenta	Testis	Pool
11928 782758	Hs.23759	AA448002	9.99	1.78	5.67	1.00	1.00	2	546.58 Ear	Whole embryo	Pool
11934 75252	Hs.23804	AA453997	13.46	2.26	5.97	3.00	1.00		Neural	Pool	LID not found
11935 211870	Hs.136566	H66708	39.78	3.98	9.99	2.00	0.00	13	119.61 CNS	Uterus	Heart
11940 502772	Hs.48988	AA137196	11.27	1.21	9.32	1.00	0.00				
11946 128167	Hs.206507	R12286	81.05	2.76	28.37	8.00	6.00	6	118.65 Heart	Placenta	Ovary
11950 340884	Hs.23822	V65597	5.81	1.01	5.53	1.00	0.00		Ignore	Thyroid	Stomach
11952 810047	Hs.49005	AA453284	18.47	3.55	5.20	1.00	0.00	1	587.83 Skin	CNS	Colon
11954 288807	Hs.20450	N52522	100.14	3.01	33.22	16.00	8.00	1	171.69 Aorta	Tonsil	Spleen
11955 486595	Hs.35086	AA099034	22.45	1.00	22.45	7.00	5.00		Testis	Germ Cell	Heart
11958 132307	Hs.23823	R27319	9.89	1.00	9.89	0.00	1.00	22	88.54 Heart	Testis	Pool
11962 355642	Hs.20468	AA025930	5.43	1.00	5.43	0.00	1.00		Forebrain	Colon	Pool
11967 265576	Hs.38759	N20039	5.92	0.94	1852.67	9.00	6.00	19	271.02 Thyroid	Adipose	Gall bladder
11968 343401	Hs.194110	V67728	185.27	0.10	11.06	3.00	0.00	10	529.82 Pool	LID not found	Other
11970 429800	Hs.124248	AA009769	14.64	1.32	11.06	3.00	0.00	9	305.41 Aorta	Breast	CNS
11971 300323	Hs.35094	N79778	25.78	1.00	25.78	9.00	6.00	15	158.43 CNS	Breast	Whole embryo
11974 276523	Hs.23850	N34849	17.12	2.89	5.72	2.00	0.00		Pool	LID not found	Other
11978 428786	Hs.20465	AA004667	70.28	3.08	22.81	13.00	0.00	3	562 Smooth musc	Thymus	Uterus
11982 795378	Hs.23860	AA453501	30.67	5.18	5.92	3.00	0.00	1	730.15		
11983 503545	Hs.202969	AA131516	11.03	0.06	168.86	8.00	1.00				
11987 197831	Hs.138864	R03543	11.78	1.86	5.96	0.00	1.00		Parathyroid	Bone	Uterus
11994 427789	Hs.204840	AA001604	13.69	2.53	5.41	1.00	0.00		Pool	LID not found	Other
11996 282863	Hs.47011	N50056	288.60	42.45	6.33	1.00	0.00	X	120.54 Nose	Prostate	LID not found
12004 482553	Hs.02103	AA082420	35.01	4.25	0.37	1.00	5.00	9	400.27 Bone	Eye	Prostate
12005 415459	Hs.172895	W80581	40.70	5.68	7.33	1.00	1.00		245.64 Pool		
12007 198868	Hs.108049	H82872	24.43	3.80	6.42	1.00	0.00	15			

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Table 3A

12011 195635	Hs.141142	R63317	11.25	1.00	11.25	7.00	3.00	X	Placenta	Pool	LID not found
12012 350631	Hs.103109	AA011086	15.35	2.97	5.16	1.00	0.00	15	130.55 Small intestine	Adipose	Prostate
12013 506817	Hs.70723	AA131683	7.78	1.00	7.78	1.00	0.00	15	334.28 Uterus	LID not found	Other
12018 059534	Hs.207933	AA458498	104.92	18.99	6.17	2.00	0.00	1	Ovary	Testis	LID not found
12018 504481	Hs.107318	AA152183	9.21	1.00	12.19	1.00	3.00	1	750.88 Skin	Placenta	Adrenal gland
12022 320509	Hs.31088	W04674	126.52	22.51	5.82	1.00	0.00	16	416.13 Head and neck	Cervix	Lymph
12028 784286	Hs.1780	AA447079	6.94	0.63	10.94	4.00	4.00	1	Thyroid	Aorta	Eye
12032 323564	Hs.25797	AA469361	45.86	8.60	6.33	1.00	0.00	14	107.89 Pool	LID not found	Other
12038 123246	Hs.191289	R00283	28.93	4.33	6.89	3.00	0.00	18	427 Aorta	Adrenal gland	Forebrain
12043 365531	Hs.146409	AA009697	94.94	7.67	7.13	3.00	0.00	4	490.87 Small intestine	CNS	Pool
12044 731054	Hs.197202	AA421276	7.46	1.46	5.10	1.00	0.00	2	663.76 Uterus	LID not found	Other
12045 505575	Hs.71034	AA147641	10.22	1.23	8.34	2.00	0.00	8	463.25	Stomach	Bone
12051 324323	Hs.28018	W047552	10.21	1.88	5.43	3.00	0.00	17	104.24 Breast	LID not found	Other
12052 759163	Hs.118223	AA480622	9.08	0.10	90.84	7.00	0.00	18	27.41 Uterus	Esophagus	Thymus
12053 501678	Hs.205624	AA128008	87.96	3.61	17.83	3.00	1.00	8	564.08 Larynx	Forebrain	Eye
12056 054686	Hs.74562	AA482668	36.84	1.00	30.64	8.00	5.00	11	277.11	Bone	Blood
12057 782832	Hs.2760	AA448266	18.62	2.15	8.65	0.00	1.00	5	358.9	Brain	LID not found
12059 204536	Hs.165907	H8250	98.09	17.68	5.55	1.00	0.00	17	283.27 Brain	Pool	LID not found
12060 291880	Hs.165907	H8250	87.91	3.66	17.59	4.00	3.00	10	460.31 Breast	Small intestine	Ovary
12067 179443	Hs.120762	H51377	33.64	6.17	5.45	1.00	0.00	2	134.5	Synovial mem	Germ Cell
12071 810711	Hs.193887	AA457700	34.00	3.65	9.33	10.00	0.00	6	183.86 Gall bladder	Parathyroid	Pooled
12072 244931	Hs.75160	H54551	6.99	1.00	6.99	4.00	1.00	15	147.26 Gall bladder	Heart	Brain
12075 490414	Hs.13472	AA122022	21.06	3.16	6.66	1.00	0.00	12	68.19 Umbilical cord	Bone	Breast
12078 866748	Hs.171811	AA63762	44.11	8.52	5.12	1.00	0.00	18	271.02	Synovial mem	CNS
12081 504179	Hs.113509	AA132070	8.43	0.00	642934.02	1.00	0.00	3	160.33 Lymph	Adrenal gland	Colon
12084 784589	Hs.80343	AA443300	6.62	0.14	48.17	4.00	5.00	16	116.84	Cervix	Skin
12085 301667	Hs.154967	N92478	12.26	2.41	5.09	0.00	1.00	1	270.57 Synovial mem	Ear	CNS
12092 590292	Hs.75742	AA155913	130.40	1.62	80.27	5.00	6.00	8	637.06 Small intestine	Bone	Pancreas
12094 144925	Hs.197008	R75521	538.48	30.01	17.88	5.00	1.00	5	417.85	Adrenal gland	Spleen
12097 342847	Hs.76162	W85281	16.05	3.05	5.27	1.00	0.00	4	574.6 Larynx	CNS	Placenta
12098 842825	Hs.2707	AA486233	29.78	1.99	14.98	2.00	0.00	19	216.1 Nose	Thymus	Synovial membrane
12102 485787	Hs.5318	AA043228	182.01	19.80	9.19	3.00	0.00	9	304.08 Whole embryo	Germ Cell	Heart
12105 756596	Hs.2359	AA444048	12.27	1.15	10.64	1.00	0.00	10	296.39 Liver	Pool	LID not found
12106 729332	Hs.76297	AA281284	34.49	6.24	5.53	1.00	2.00	12	318.65 Smooth muscle	Esophagus	Adipose
12107 736559	Hs.166535	T54527	8.41	1.00	8.41	3.00	2.00	22	154.77 Ignore	Placenta	Esophagus
12110 730002	Hs.167227	AA416552	52.69	4.38	12.04	4.00	0.00	8	447.53 Liver	Forebrain	CNS
12117 767585	Hs.74451	AA047567	42.86	7.44	5.76	2.00	0.00	14	278.45	Ear	Breast
12126 325182	Hs.161	W09819	144.60	2.55	58.80	17.00	3.00	3	148.58 Pooled	Ear	Forebrain
12127 61474	Hs.8348	T40936	9.30	1.00	9.30	6.00	2.00	7	492.68 Small intestine	Thymus	Synovial membrane
12133 654576	Hs.16539	AA669128	55.43	9.48	5.85	1.00	0.00	3	143.12 CNS	Whole embryo	Brain
12135 81502	Hs.2102	T40950	16.17	0.80	20.26	4.00	2.00	4	443.86 Adipose	Uterus	Kidney
12137 770384	Hs.160741	AA430668	73.23	9.95	7.36	0.00	3.00	4	443.86 Adipose	Uterus	Kidney
12142 344957	Hs.2621	W72207	28.73	3.48	7.40	1.00	1.00	4	443.86 Adipose	Uterus	Kidney
12143 77811	Hs.8348	T61269	11.40	1.00	11.40	2.00	2.00	4	443.86 Adipose	Uterus	Kidney
12145 555745	Hs.140	AA663581	29.67	3.32	8.93	0.00	6.00	4	443.86 Adipose	Uterus	Kidney
12146 355516	Hs.164568	AA009609	134.72	3.07	43.87	19.00	6.00	4	443.86 Adipose	Uterus	Kidney
12147 32804	Hs.5867	H20044	59.20	9.30	5.72	1.00	0.00	4	443.86 Adipose	Uterus	Kidney
12148 897271	Hs.94592	AA677655	6.18	0.10	61.85	7.00	6.00	4	443.86 Adipose	Uterus	Kidney
12151 78946	Hs.8364	T61792	49.64	1.61	30.77	4.00	2.00	4	443.86 Adipose	Uterus	Kidney
12152 34442	Hs.2820	R4895	17.53	1.82	9.64	1.00	4.00	4	443.86 Adipose	Uterus	Kidney
12153 77539	Hs.10459	T58775	41.59	0.53	79.04	8.00	6.00	4	443.86 Adipose	Uterus	Kidney
12155 76169	Hs.5897	T58658	302.26	8.75	34.55	23.00	4.00	4	443.86 Adipose	Uterus	Kidney
12157 504781	Hs.169007	AA152347	81.29	6.88	11.81	7.00	4.00	4	443.86 Adipose	Uterus	Kidney